City of Salford

ANNUAL REPORT

OF THE

Medical Officer of Health

FOR THE YEAR

1947

BY

J. L. BURN, M.D., D.Hy., D.P.H.,

MEDICAL OFFICER OF HEALTH

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Members of the Health Committee,

1947-48.

Alderman W. W. Crabtree, *Chairman.*

Councillor G. H. Goulden, *Deputy-Chairman.*

Alderman J. Brentnall, J.P. (*Mayor*).

,, T. Clarke, J.P. (*Deputy-Mayor*).

,, Lemmon, J.P.

,, Sands, G. W., J.P.

,, Shlosberg, J.

,, Webb, J. A., J.P., M.B.E.

Councillor Bell.

,, Brookes.

,, Butler.

,, Clark.

,, Cooper.

,, Haynes, J.P.

,, Mallinson.

,, Marron.

,, Openshaw, J.P.

STAFF.

Public Health Department—1947.

Medical Officer of Health Administrative Tuberculosis Officer	J. L. Burn, M.D., D.Hy., D.P.H.
Clinical Tuberculosis Officer	R. N. Walker, M.D., D.P.H.
Maternity and Child Welfare Medical Officers	M. Sproul, M.B., Ch.B., D.P.H. K. M. Boyes, M.B., Ch.B., D.P.H. M. Maxwell-Reekie, M.B., Ch.B.
City Pathologist	G. J. Crawford, B.Sc., M.D., M.R.C.P. (Lond.), D.P.H.
Assistant Pathologist	L. Stent, M.D., M.R.C.S., L.R.C.P.
Venereal Diseases Medical Officer	A. J. Gill, M.B., Ch.B., M.R.C.S., L.R.C.P., D.P.H.
Asst. Venereal Diseases Medical Officers.	F. M. Blades, M.B., Ch.B. A. W. Ritchie, M.B., Ch.B., D.P.H. (part-time).

HOPE HOSPITAL.

Whole-time Staff.

Medical Superintendent	George Brown, M.B., Ch.B., F.R.C.S. (Edin.).
Deputy Medical Superintendent and Physician	William Mackay, M.D., F.R.F.P.S. (Glas.).
Obstetric Officer	E. F. Rawlings, M.B., Ch.B., M.D., M.R.C.O.G.
Surgeon	C. Grimshaw, M.B., Ch.B., D.R.C.O.G., F.R.C.S.E.
Assistant Medical Officers	Seven.

Visiting (Part-time) Staff.

Physician	J. S. Parkinson, M.D., M.R.C.P., D.P.H.
Physician for Diseases of Children	C. Chisholm, C.B.E., B.A., M.B., B.Ch., M.D. (Manch.).
Obstetrician and Gynæcologist	C. E. B. Rickards, M.B., Ch.B., M.R.C.O.G.
Orthopædic Surgeon	S. M. Milner, M.A., M.B., Ch.B., F.R.C.S. (Eng.).
General Surgeon	T. S. Heslop, M.B., Ch.B., F.R.C.S. (Eng.).
Surgeon for the Diseases of the Ear, Nose and Throat.	W. B. McKelvie, M.D., Ch.M., F.R.C.S.E., D.L.O.
Ophthalmologist	F. Janus, M.B., Ch.B., M.R.C.S., L.R.C.P., M.D.

Accident Officer	C. Brun, M.B., B.S., M.R.C.S., L.R.C.P., F.R.C.S.
Tuberculosis Specialist	R. N. Walker, M.B., Ch.B., D.P.H., M.D.
Venereologist and Dermatologist	A. J. Gill, M.B., Ch.B., D.P.H.
Radiologist	J. Ghosh, F.R.C.S.I., D.P.H., L.M.S.
Pathologist	G. J. Crawford, B.Sc., M.D., M.B., Ch.B., M.R.C.P., D.P.H.
Assistant Pathologist	E. Greenwood, M.R.C.S., L.R.C.P.
Visiting Anæsthetists	J. Ghosh, F.R.C.S.I., D.P.H., L.M.S. W. Kupfermann, L.R.C.P. & S., D.A. J. Sneddon, M.B., Ch.B., D.A.
Dental Surgeon	L. H. Pollitt, L.D.S.
Chiropodist	F. Charlesworth, F.Ch.S.

Matron	Miss K. Martin, S.R.N., S.C.M.
Secretary-Steward	C. A. A. Hankins, F.C.C.S., F.H.A.

LADYWELL SANATORIUM.

Medical Superintendent	W. Edge, M.R.C.S., L.R.C.P., D.P.H.
Assistant Resident Medical Officer	Miss M. Kamiel, M.D.U. (Leipzig).
Visiting Aural Surgeon	W. B. McKelvie, M.D., Ch.M., F.R.C.S.E., D.L.O.
Matron	Miss M. A. Hitchen, S.R.N., S.C.M.

NAB TOP SANATORIUM.

Medical Superintendent	H. M. Fleming, B.A., M.D., Ch.B., B.A.O., D.P.H.
Consultant Thoracic Surgeon	A. Graham Bryce, M.D., F.R.C.S., D.P.H.
Matron	Miss H. M. Sheen, S.R.N., S.C.M.

Public Analyst	A. N. Leather, B.Sc., F.R.I.C.
Chief Administrative Assistant	E. Wood, C.R.S.I.
Chief Sanitary Inspector	P. Pilgrim, C.R.S.I.

INTRODUCTION.

To the Chairman and Members of the Health Committee.

Mr. Chairman, Ladies and Gentlemen,

The year 1947 was a year of hard work. Here are some facts and figures which speak for themselves. It was a year in which :—

- the population numbered 174,070 people, the vast majority of whom need and use our Health Services to a degree hardly parallelled elsewhere;
- the total number of births (4,335) was the highest for over 20 years ;
- all available sanitary personnel were organised in a special campaign to secure quicker repairs to houses ;
- there was a fuel crisis and cold spell (which was one cause of an increase in our infant mortality figures) ;
- plans for carrying out new duties under the National Health Service Act were prepared ;
- by the end of the year, three quarters of *all* children under 5, and over 90 per cent. of children 5 to 15 had received a course of immunisation against diphtheria ;
- an outbreak of poliomyelitis involved more than 50 patients.

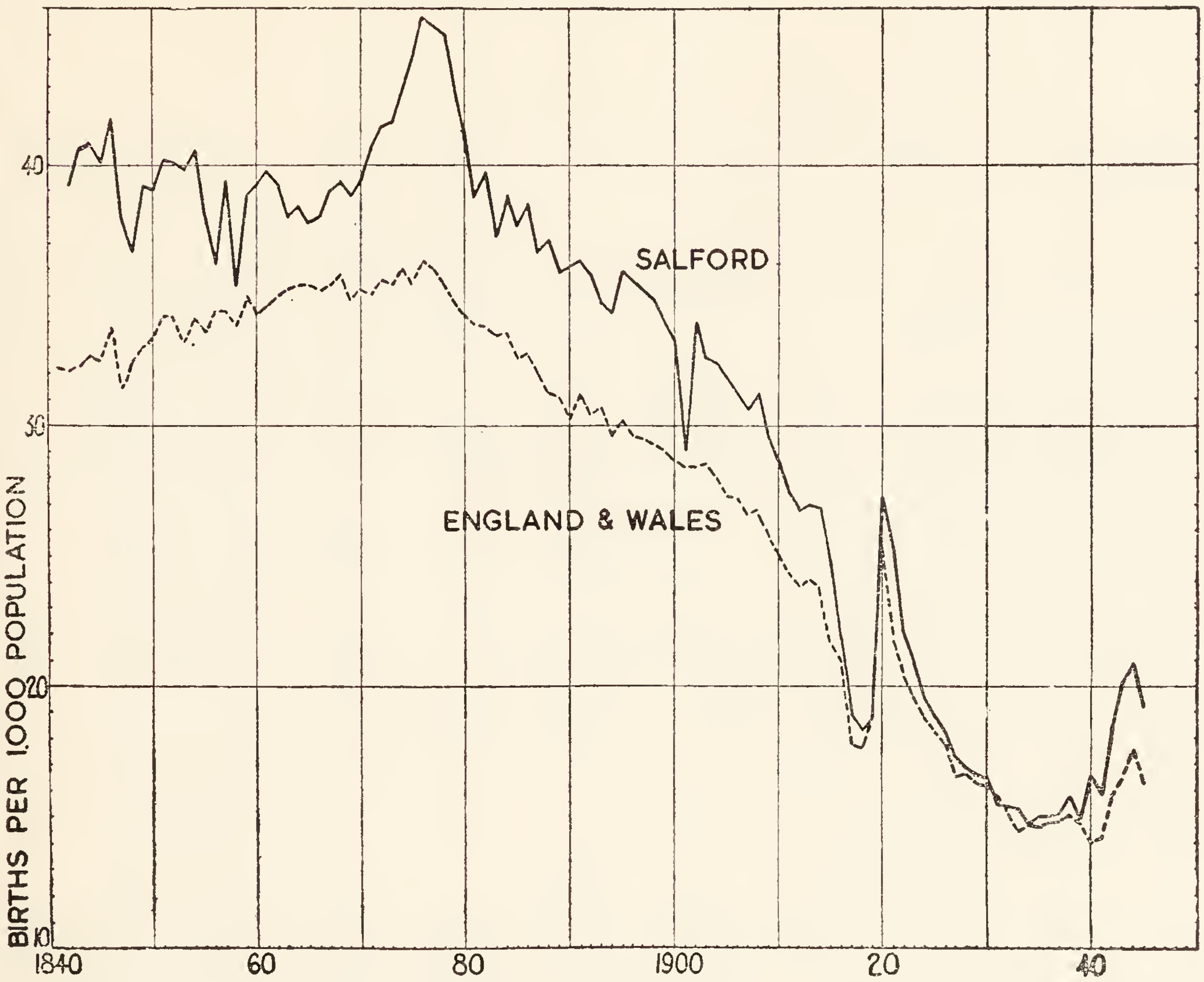
Yet in spite of all adverse factors the general death rate fell from 15·5 in the previous year, to 13·27.

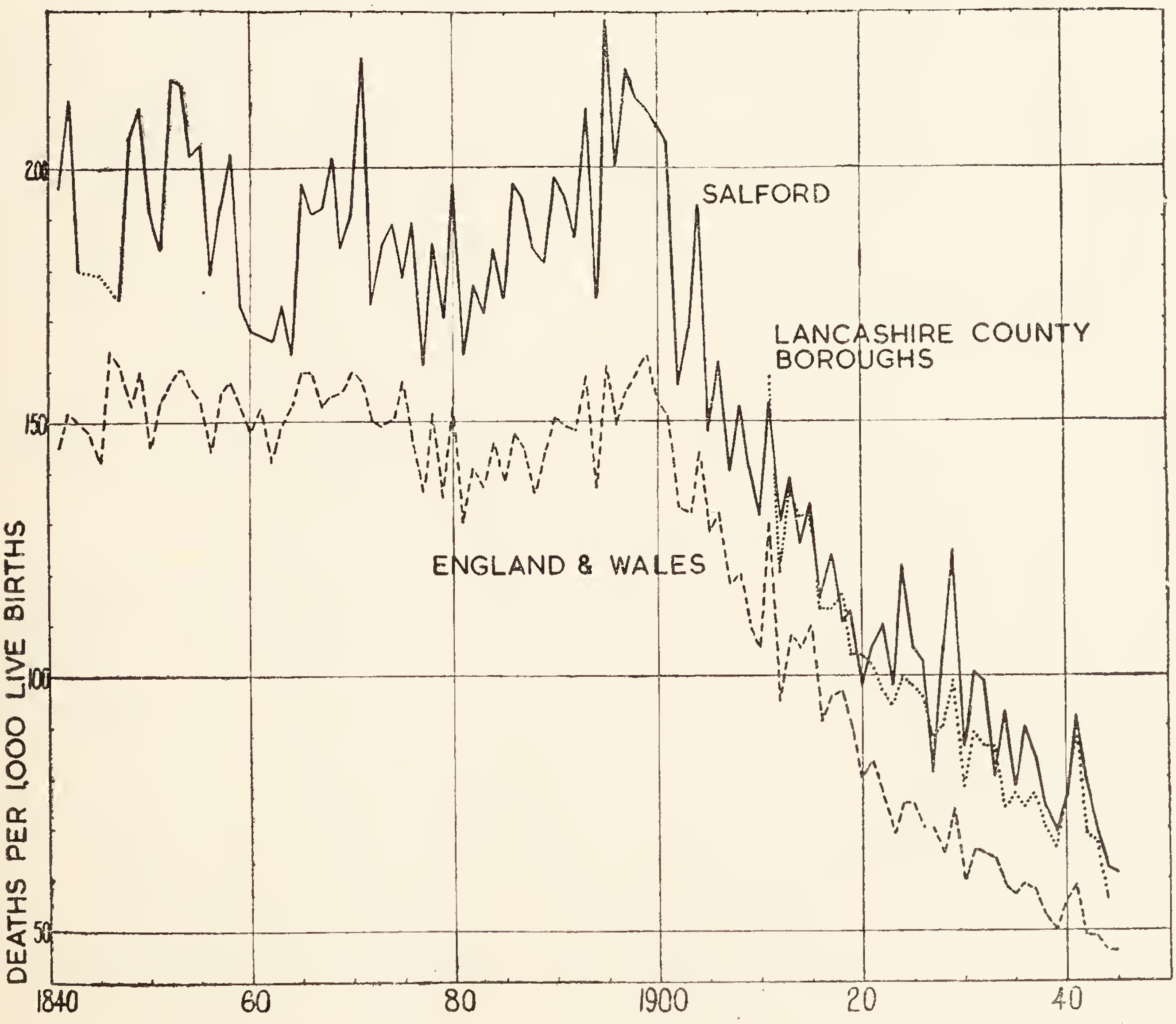
The lack of new building, the large number of *unsatisfactory houses* in the City, out-of-date property of dilapidated structure, requiring repairs at heavy cost and consumption of material ; the crowding of 50,000 houses in an available acreage of 2,500 acres, the lack of green spaces, the smoke evil, and the fact that well over half of our houses have no satisfactory ventilated food storage accommodation and over half of our houses have no hot water supply and no baths ; all these facts constitute one huge problem which still confronts us. The efforts taken to improve the situation are told in the following pages.

Infant Care. The low infant mortality rate recorded in 1946, 53 per 1,000 (that is, low for a crowded industrial community), was not maintained ; the severe weather experienced in the first months of the year was associated with the high death rate among infants. Two hundred and fifty-eight infants, born alive, died before reaching their first birthday ; of these, 118 in the first quarter of the year—38 due to respiratory disease, 16 from gastro-enteritis and 13 from prematurity.

No less than eight infants died from suffocation whilst being in bed with parents ; six of them during the cold spell. The occurrence of *home accidents* received special investigation ; reports were compiled by health visitors and forwarded to a central department investigating this costly toll of child life. Examples of these sad accidents in the home, which had serious and sometimes fatal consequences, are quoted in the body of the report.

The variations of the birth—and infant mortality—rates are shown graphically on the charts reproduced here :—





I am unable to report any considerable improvement in *clinic accommodation*, nor could premises be found suitable as a hostel for midwives.

A special, though perhaps melancholy, interest attaches to the preparation of this report, for 1947 was the last complete year in which the hospitals remained under the control of the Local Authority. It may be pardonable, therefore, to refer to the many improvements which the Local Authority were able to make in their *municipal hospital* and *specialist* services. These improvements were in spite of the fact that during the 17 years in which the hospitals were under Local Authority control, at least 13 years were occupied either in war, in preparation for war, or in the difficult post-war years, or by the economic crisis of 1931. It should not be forgotten that in spite of these difficulties the Local Authority did much to improve the care given to the people ; not only were better services provided, but a personal interest in the care and comfort of the individual patient was taken. Among the many services instituted were :—

Medico-social services, rehabilitation services, a breast feeding clinic, some modernisation of wards and of X-ray equipment, a new cubicle block, and above all, improved consulting services covering many fields.

Altogether it is not a bad record.

In addition to the Department's day-to-day work (for it is the humdrum routine work on which the health of the people mainly depends), time was found to devote to special aspects of modern public health services, such as the care of problem families, the arrangements for convalescence of mothers and children at Recuperation Centres, contact tracing in V.D., special surveys of the incidence of infestation, and several features of interest in maternity and child welfare services—all of which are mentioned in the body of the report which follows.

I wish to record my appreciation of the loyal and zealous service rendered by your staff during the year.

I have the honour to be,

Your obedient servant,

J. L. Burn

Medical Officer of Health.

HEALTH DEPARTMENT,
143, REGENT ROAD,
SALFORD, 5.

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STATISTICAL SUMMARY, 1947.

Area.—The City of Salford has a total area of 5,202 acres.

Population.—(Registrar-General's Estimate at Mid-year, 1947)	174,070
„ (Census, 1931)	223,438

Density.—The Mean Density of the City is equal to 33·5 persons per acre.

Live Births	**Legitimate**	**2,027**	**Males,**	**1,946**	**Females**	3,973
	Illegitimate	**119**	**„**	**128**	**„**	247
					Total	4,220

Annual Rate of Births per 1,000 of the Population				24·2
Still Births	**Males**	**60**	**Total**	119
	Females	**59**		
Annual Rate of Still Births per 1,000 Total Births				27·4
Deaths	**Males**	**1,247**		2,310
	Females	**1,063**		
Annual Rate of Mortality per 1,000 of the Population				13·3
Percentage of total deaths occurring in Public Institutions				52·0 per cent.

Deaths from Puerperal Causes :—	Deaths.	Rate per 1,000 Total Births.
Puerperal Sepsis	...	...
Other Puerperal Causes	3	0·7
Total	3	0·7

Death-rate of Infants under one year of age per 1,000 live births :—

Legitimate, 60. Illegitimate, 73. Total	61
Deaths from Measles (all ages)	8
„ „ **Whooping Cough** (all ages)	6
„ „ **Diarrhoea** (under 2 years of age)	54

TABLE M. 4.

Showing the Births in the City of Salford, Deaths of Legitimate and Illegitimate Infants under One Year old and the proportion of Deaths under One Year of age per 1,000 Births during the Years 1938 to 1947.

Years.	Births.			Percentage of Illegitimate Births to Total Births.	Deaths under One Year.			Porportion of Deaths under One Year per 1,000 Births.		
	Total.	Legit.	Illegit.		Total.	Legit.	Illegit.	Total.	Legit.	Illegit.
38	3145	3037	108	3·4	233	213	20	74	70	185
39	2925	2808	117	4·0	202	194	8	69	69	68
40	2884	2742	142	4·9	219	209	10	76	75	70
41	2518	2377	141	5·5	240	215	25	96	90	177
42	2823	2632	191	6·8	217	203	14	77	77	73
43	3085	2863	222	7·2	214	203	11	69	71	50
44	3251	3025	226	7·0	202	182	20	62	63	88
45	3022	2749	273	9·0	183	168	15	61	61	55
46	3849	3610	239	6·2	205	180	25	53	50	104
47	4220	3973	247	5·9	258	240	18	61	60	73

TABLE M. 5.

owing the Birth-rates, also Rates of Mortality from all Causes, from the Seven Principal Zymotic Diseases, and from Tuberculosis of Respiratory System, Cancer, Nervous Diseases, Heart Diseases, Bronchitis, Pneumonia and the Infant Mortality Rate during the Years 1938 to 1947.

ears.	Population.	Rates per 1,000 Population from									Deaths under One Year to 1,000 Births.	Marriage Rate.
		Births.	Deaths, All Causes.	Seven Principal Zymotic Diseases.	Tuberculosis of Respiratory System.	Cancer.	Nervous Diseases.	Heart Diseases.	Bronchitis.	Pneumonia.		
38 ...	199,400	15·8	13·1	0·3	0·9	1·7	0·8	2·8	0·6	1·0	74	...
39 ...	196,600	14·9	14·3	0·2	0·9	1·8	0·7	3·8	0·7	1·0	69	...
40 ...	173,200†	16·6	19·1	0·3	1·1	2·0	1·1	5·3	1·7	1·2	76	...
41 ...	159,720†	15·8	16·8	0·4	1·1	1·7	1·1	4·3	1·1	1·2	96	...
42 ...	153,300†	18·4	14·5	0·4	0·9	2·2	1·0	3·4	0·9	0·8	77	...
verage 5 years	**16·3**	**15·6**	**0·3**	**1·0**	**1·9**	**0·9**	**3·9**	**1·0**	**1·0**	78	...
43 ...	153,000†	20·2	15·7	0·3	1·0	2·2	0·9	2·7	1·9	0·9	69	...
44 ...	155,810†	20·9	14·6	0·4	0·9	2·1	0·9	2·4	1·9	0·6	62	...
45 ...	157,300†	19·2	15·5	0·2	0·9	2·0	0·8	2·2	2·9	0·8	61	...
46 ...	169,470	22·7	13·3	0·2	0·8	1·9	0·9	1·8	2·0	0·6	53	...
47 ...	174,070	24·2	13·3	0·4	0·8	2·0	0·5	2·1	1·9	0·6	61	...
verage 5 years	21·4	14·5	0·3	0·9	2·0	0·3	2·3	2·1	0·7	61	...

† Civil population.

SANITARY CIRCUMSTANCES AND ADMINISTRATION.

The following are the outstanding features of the year's work :—

Water.

The water supply is obtained from the Manchester Corporation's reservoirs at Longdendale and Thirlmere. A serious shortage was threatened during the summer months but fortunately it did not affect the supply to this town. In general the supply has been satisfactory in quantity and quality. For further details relating to quality see the City Analyst's report, page 98, and the City Pathologist's report, page 56.

All dwellinghouses in the City and the entire population are supplied with water on the constant system laid on from the mains direct to the houses.

There are 47,329 dwellinghouses in the City and a population of 174070.

Housing.

Another year has passed since the end of war emergency and, as far as housing conditions are concerned, 1947 must be regarded as a year of improvisation.

Recovery from the effects of the war is slow, and there has been no chance of commencing long overdue reconstruction, in the primary stages of which the sweeping away of 20,000 slum houses is envisaged.

Recapitulating the details of Salford's housing position, there are 47329 houses crowded into an industrial district with a gross acreage of 5,202. Two thousand seven hundred houses have been written off as loss of domestic accommodation due to bomb damage.

Seventy per cent. of the existing dwellinghouse property was erected in the 19th century and notwithstanding much remodelling work executed during the last 60 years the majority of these premises can only be described as congested, worn-out slum dwellings, deficient of amenity and comfort.

There are inevitably many cases of overcrowding in connection with which legal action for abatement would be somewhat unreasonable in these difficult days.

Another feature of present housing hardship is the increase in the number of families living in lodgings.

Against this picture of insufficiency and squalor, the current building programme has produced for Salford in 1947 only 228 new houses, of which 180 were erected by the local authority and 48 by private enterprise. The houses have all been built upon sites within the City boundaries ; available sites within the district are now practically exhausted.

The new houses have naturally been devoted to relief of general shortage and have therefore had no effect upon the generally unhealthy housing position. Consequently there has been constant expenditure of time and money on efforts to keep " alive " thousands of worn-out houses, a proceeding rendered difficult by shortage of materials and time-lag in obtaining supplies of materials.

A most interesting, yet to some extent embarrassing, housing feature to-day is the complete reversal of the position as between local authority and owner. Whereas, before the war, property owners took every opportunity to contest with the local authority the issue of condemnation and demolition of houses which were deemed to be unhealthy, we now have the position in reverse—there is a general tendency for owners to approach the local authority for assistance in unburdening themselves of property which, under present-day conditions, is a liability ; they request the authority to take the appropriate action under the Housing Act which will result in demolition.

The local authority, however, under prevailing circumstances, are reluctantly constrained not to adopt the demolition proposals and to require the owners to continue to maintain the houses. Even though the owners' contention that a house is not capable of satisfactory repair at reasonable expense is substantially correct, the making of orders for demolition is a futile proceeding, having regard to the authority's inability to provide alternative accommodation for the rehousing of the persons displaced.

If, subsequently, the local authority issue notices requiring repairs or abatement of nuisances at such houses, it has become commonplace to receive written proposals that the Corporation take over and administer the property or that the authority should execute works demanded and recoup incurred expenses by collection from tenants of sums equivalent to weekly rents.

Another increasingly common situation is discovered in the abandonment by owners and trustees of unremunerative dwellinghouse properties. Tenants are left in possession and demand for rent is discontinued.

Many cases also occur in which beneficiaries under a will refrain from proving the will if the estate in question consists of indifferent dwellinghouse property.

In all the many cases of the types above-mentioned, formal procedure by the local authority under the Public Health Act progresses in a routine manner, viz., service of notice, complaint to a Justice, Nuisance Order, and eventual Corporation entry for execution of works by default.

Rent control coupled with high maintenance costs has also brought into relief very many instances of the inability of impecunious owners of occupied houses to comply with council demands for repair works. When such persons have proved their circumstances it has been considered expedient to allow them to give written authorisation for the execution of repair work by the Corporation on their behalf ; this procedure is regarded as being a commonsense alternative to legal proceedings.

From the foregoing resume of current circumstances it will be seen that to-day we are experiencing a different phase in the evolution of the housing of the working classes. At the present time, the local authority is compelled to insist upon the retention in use of obsolete, worn-out dwellings ; further, the public are becoming saddled with an ever-increasing drain upon local public funds to cover the cost of repairs to large numbers of slum houses ; and it has to be borne in mind that although there is machinery for the recovery of such expenditure by one means or another, it is more than probable that a considerable portion of the moneys so expended must eventually be written off as irrecoverable.

So, while we wait for the opportunity to go ahead with prepared plans for complete reconstruction, the sweeping away of slums and their replacement with houses of modern design and layout, our efforts are concentrated upon making the best of existing unsatisfactory accommodation by informal and formal procedure. The following 1947 figures illustrate the amount of work accomplished in this direction, viz. :—

Number of dwellinghouses visited by Inspectors	40,942
Number of Notices served (P.H. Act)	11,562
Number of Notices complied with	9,251
Number of default cases heard before the court	90

In the following cases of premises which were unfit, dangerous and totally beyond further repair, the Council made demolition orders under Part 2 of the Housing Act, 1936, viz. :—

Thirty-six dwellinghouses and one van dwelling.

One closing order under the provisions of Section 12 of the Act was made in respect of a part of a building unfit for human habitation ; in this instance it became necessary for legal proceedings to be instituted befóre possession was obtained.

Tents, Vans and Sheds.

One deplorable consequence of housing shortage has been the creation of colonies domiciled in temporary or moveable structures.

Shanty-town development in the early 1920's—the period following the 1914-1918 war—will be clearly remembered, when large sites in various parts of the country became covered with sheds and converted vehicles of every description, bringing into being an extremely low housing standard for large numbers of people.

It is probable that there will be a recurrence of this undesirable feature in the present post-war period. People who suffer a surfeit of life in lodgings are prone to accept with alacrity an opportunity to obtain a home of their own, even when the home consists of a dilapidated van structure lacking domestic amenities.

A typical colony developed upon a site in Salford in the vicinity of the Docks. The ownership of the land was obscure ; at all events no owner or occupier demurred against the parking of vehicles upon the site ; there was no demand for rent or rates levied upon the van dwellers.

Prior to the war, this plot of land had been used periodically as a fair-ground, for short periods, and at some time, early in the war, a few showmen's vehicles had become immobilised here as a result of the operation of two factors, (*a*) inability to obtain petrol and (*b*) direction of men and women to Forces or war production.

After the end of the war there began an invasion of this land by vehicles of many kinds converted to domestic use, until, on 3rd January, 1947, there were 49 vans and three tents upon the site ; some owner-occupied and others tenanted at a weekly rent. Only 11 of the van dwellers had claim to showman classification ; there were 18 gypsy families ; the remainder were ordinary working-class people living in this way owing to inability to obtain more orthodox accommodation.

The usual unwholesome features of such environment were all present, viz., there was no proper sanitary accommodation ; there was no arrangement for scavenging domestic refuse ; the contours of the district made this land into a natural basin ; there was no drainage, and waste water, thrown upon the surface, turned the ground into a scummy quagmire ; there were inevitable accumulations of organic refuse and noticeable effluvia.

Some of the structures were in a weather-beaten condition.

The only redeeming feature was that a standpipe erected for showmen ten years ago was still available to provide a supply of town's mains water at a point not too far distant from the vans.

Establishment of a colony of this nature, threatening to become a permanent feature of the district, could not, of course, be countenanced, and even though the authority might be accused of causing increased hardship at a time of housing shortage, dispersal of the colony was imperative in the interests of the public health.

The matter of procedure in such a case is of interest.

1. Clearance Order procedure under Part III of the Housing Act, 1936, was impracticable having regard to the facts : (*a*) all vans had not been upon the site for a period of two years, and (*b*) the Corporation, in advance of clearance order action, must be in a position to offer rehousing accommodation specially provided for the displacements.

2. In accordance with the provisions of Section 268 of the Public Health Act, 1936, action for nuisance under Part III of that statute may have been taken, but it had to be borne in mind that, if in compliance with abatement notices, the van dwellers, or the occupiers of the land, executed such works as drainage, provisions of sanitary accommodation, etc., it may become implied that vans and site are suitable for use.

3. The procedure adopted in this case was the application of the provisions of a clause in the Salford Corporation Act, 1927, which prohibits the parking of vans within the City without Corporation sanction. When intimation notices were given to the van dwellers that legal proceedings were to be instituted for contravention of the local law, they all disappeared.

Uncontrolled development of camping sites in an urban locality is much to be deplored and cannot be tolerated.

Smoke Abatement.

Observing the ever-increasing density of the smoke issuing from industrial chimneys, first thoughts on the achievements of the past twelve months are rather disquieting, but to appreciate the quality of the work accomplished one needs to be more intimately associated with smoke abatement activities.

It has been a year of difficulty accentuated by the necessity to export coal, most of it our best steam-coal. The Ministry of Fuel and Power endeavours to give priority in the matter of coal supplies according to the type of furnace in which it is to be used and the essential nature of the particular industry. It does so remarkably well, but all and sundry are required to use a reasonable proportion of low-grade fuel. Thus the quality of the fuel in a given instance may vary considerably from time to time, whilst in some works it remains low all the time.

The need to maintain steam production at a high level taxes the ingenuity of the works engineer and the patience of the stokers most where the quality varies most. Tribute is due to the general body of works engineers, many of whom are smoke abatement enthusiasts by force of circumstances as well as from choice. Their task is often rendered more difficult by long delays in obtaining new equipment or replacement of parts, especially if their industry is not essential to the nation's immediate needs, and the Ministry's aid in overcoming this difficulty has proved valuable in some cases.

Boiler-plant is usually designed to burn a particular range of fuels and any marked deviation reduces its efficiency. In some cases this can be minimised by mixing the fuels (not easy to accomplish well in the boiler-house) or by using the low-grade fuel when steam is not in great demand. Many instances occur, however, where the plant, already loaded to its maximum steam output, has to be forced at peak periods. This has given rise to a greater number of complaints of grit emission. Four such cases have been investigated and grit emission reduced considerably or eliminated ; in one case by more thorough flue cleansing, in another by the Ministry changing the grade of fuel, a third by reducing the draught to minimum requirements. The fourth case was of a temporary nature due to the use of a very flocculent type of wood waste in the furnace, the nuisance disappearing on its withdrawal from use.

The prevalence of low-grade fuels has induced manufacturers of stoking plant to design apparatus for promoting better combustion with them, naturally with less smoke, and news is continually coming to hand of improved mechanical stoking appliances, etc. With these new developments arising as they do from desperate needs, our sufferings will not have been in vain if and when better-grade fuels become available.

Two years ago a prospect existed that conversion to oil fuel would replace much of the coal used in industry, but, for various reasons, the use of it is not now expected to increase.

Worthy of note is the continued interest in the lectures for boiler firemen and stokers. Attendances again approached maximum proportions.

In the domestic field the foundations of future benefit continue to be laid. Every Government-inspired house or flat erected in Salford is equipped with at least one firegrate designed to burn smokeless fuel or to burn other fuel with less smoke. Increasing numbers of such houses are appearing at Summerville, Weaste, and Littleton Road estates and every encouragement is given the tenants to use smokeless fuels by making available sufficient coke for their needs. Many of them use no coal at all; most use coal and coke in equal proportions, whilst others, for reasons which they themselves cannot explain, still rely on coal. A frequent objection to coke is that it interferes with respiration in certain diseases. Of course, the same is true of any of the waste products of combustion, which are intended to be conveyed up the chimney, so that where trouble of this nature does occur, it is the flue and not the fuel which is at fault. Care is taken over the design and construction of flues in new houses to ensure their efficient functioning. In the case of at least one type of house the flues have been redesigned for this explicit reason.

The North Western Regional Committee of the Smoke Abatement Society continues to perform a very useful function by providing a pool of knowledge and experiences. In November, Salford was the venue for a talk and discussion on " Smokeless Domestic Heating Appliances," accompanying which was a small exhibition of the latest solid fuel appliances all of which were specially designed to burn smokeless fuels.

It is hoped ere the time arrives for another report to be presented increased powers to curtail smoke emission into the atmosphere will operate. I refer to the prospects contained in the Salford Corporation Bill which, it is hoped, will have become an Act by the time this report is circulated.

Shops Acts, 1912-1936.

Complaints regarding contraventions of the law relating to sanitary and other arrangements in shops, were dealt with, but the shortage of staff prevented the regular inspection of shops. Constant supervision is necessary and next year may see this carried out. The maintenance of cleanliness and of a proper standard of sanitary accommodation and washing facilities, etc., is of paramount importance, not only because of the comfort and well-being of the employees, but because of the dangers arising in the purchase of food, clothing and furniture and in hairdressing establishments, when the standards are low.

The position regarding the early closing of shops has undergone a revolution since the war, a considerable number of shops closing earlier than the times required by law, but, nevertheless, certain types of shops, notably hairdressing, require supervision.

The position of the adolescent employee has been affected by the raising of the school-age, the number of young persons being considerably lower.

The employment of " young persons " on Sundays, at cinemas and at refreshment bars, after they may have been working at a factory during the week, is receiving attention, and any contravention of the Act will be dealt with.

Control of Insect Pests.

The operation of a municipal disinfestation service has become a feature of sanitary and social importance.

Two operators have been continuously at work throughout the year ; during the summer months pressure of work made necessary the recruitment of additional labour.

A light van is used for transporting around the district the men, the materials and equipment which consists of pneumatic spraying machines and powder insufflators.

During this year, disinfestation treatments have been accomplished, in the main, with routine recognised DDT formulations, viz. : (*a*) Kerosene spray solutions containing 3, 4 or 5 per cent. DDT content ; (*b*) water-suspended DDT spray, in which 2 lbs. of 33 per cent. DDT wettable powder per gallon of water gives an approximate deposit of 5 per cent. DDT ; and (*c*) dry DDT applied as dust, which contains 10 per cent. DDT in China Clay.

There has been little opportunity in 1947 to carry out work of an experimental nature but the following matters are worthy of record :—

(1) In newly-erected flats floors of Val-de-Travers asphalt were laid. As tenancies were allocated it was deemed necessary to set up a toxic barrier against probable introduction of bedbugs in furniture. As the first flat was treated with DDT-Kerosene solution it was observed that the Kerosene softened the top surface layer of asphalt flooring. As absorption of extraneous oil into flooring mass would doubtless prove to be serious, operations with the Kerosene formulation were discontinued. The alternative treatment resorted to, viz. : 25 per cent. DDT Emulsion diluted with water in the ratio of one pint of Conc. Emuls. to seven pints water (3 per cent. DDT), sprayed upon the walls, has given the desired bug-proof result without damage to asphalt surfaces.

(2) One hundred and twenty-four new houses of the Easiform concrete type were erected and completed during the year. One hundred and seventy pounds of 33 per cent. DDT wettable powder was supplied to the builder for admixture to the walpamur applied for interior decoration of houses, on completion of the buildings and prior to occupation.

The painting contractor reported that brushwork was not impeded.

As far as it is possible to ascertain by periodic inspections there has been no case of bug infestation during the first few months of occupation and there has been a notable absence of flies within the houses on the new estate.

(3) Eleven houses were treated with Gammexane Smoke Pellets.

The following statistics present an outline of the extent of insect control operations in Salford during 1947 :—

TABLE 1.

Insect attacked.	*No. of Cases.*
Bedbugs	367
Cockroaches	231
Flies	51
Lice	11
Fleas	23
Crickets	12
Moths	3
Silver Fish	2
Mosquitoes	2
Furniture Beetles	2
Bees	2
Wasps	2
Garden Beetles	1

TABLE 2.

Type of premises treated.	*No.*	
Dwellinghouses	586	232 Council owned
Flats	24	378 privately ,,
Van Dwellings	2	
Nurseries	17	
Factories	9	
Canteens	15	
Bakehouses	4	
Shops and Stores	6	
Hostels and Public Houses	4	
Offices, &c.	9	
Fire Stations	2	
Railway Station	1	
Police Station (Cells, &c.)	1	
Schools	6	
Piggery	1	
Cinema	1	

In addition to the above, routine visits were paid to hospitals for extermination of cockroaches and for administration of treatment for fly control, as follows :—

Salford Royal Hospital (General)	30	visits
Hope Hospital (General)	16	,,
Ladywell Hospital (Infectious Diseases)	26	,,
Nab Top Sanatorium (Tuberculosis)	2	,,
Total Hospital Visits	74	

The large municipal lodging house, containing cubicles to accommodate 285 men, has also this year been treated throughout, to set up a toxic barrier against re-introduction of insect vermin.

Four persons calling at the Department were deloused at their own request.

Thirteen houses which were demolished in accordance with orders made by the Council under Housing Act provisions were subjected to treatment for cleansing from insect vermin. This year, chemical insecticides have been used for the purpose, and the treatment will have effected some measure of precaution against dissemination of insect vermin through the medium of building material salvage, although it is probable that HCN gas fumigation which has heretofore been a routine measure in Salford may be more advantageous in the case of buildings to be demolished immediately after cleansing treatment.

During the year there have been 61 cases of families leaving verminous or probably verminous premises to take over an allocated Corporation tenancy. In all such cases precautionary treatment was effected to prevent transfer of bedbugs from one house to the other by the application of DDT by spray to all furniture and effects at the premises to be vacated and spray treatment of the interior fabric of the new house prior to the removal.

The final item of this report on disinfestation work in 1947 concerns a large amount of work carried out during the summer outbreak of *Infantile Paralysis.*

The following action was taken for destruction of flies :—

(1) All ashbins in the City (approximately 50,000) were sprayed with DDT suspended in water in proportion to give a 6 per cent. DDT wash.

(2) Every School in the City (total 63) was visited for DDT spray treatment of outhouses, sanitary conveniences, etc.

(3) At 20 stable premises, DDT spray treatment of stalls and manure receptacles was effected.

By enlisting the assistance of the Director of Public Cleansing who drafted into the task three squads of workmen, it became possible for all these operations to be accomplished in six weeks.

Hygienic Requirements in Food Premises.

It has been authoritatively stated that there are about 5,000 deaths annually in this country from food and drink infections. These are preventable. Such figures bring home very forcibly the need for the strictest possible supervision of the food supply at every point in its production, manufacture, storage and distribution.

A survey of all food premises is long overdue in this town, as elsewhere. The plans are made but lack the necessary staff to put them into operation. It is estimated that at least 70 per cent. of the retail food premises are without a sufficient hot water supply, so that even the most elementary principles of hygiene are impracticable. Painting and decorations have waited upon war-time economy until they can wait no longer, and the finer points, such as correct storage of foodstuffs and up-to-date equipment are in general conspicuous by their absence. This state of affairs is to be expected in this early post-war period, but it must not persist. It is hoped that the measures recommended in the Salford Corporation Bill will be adopted and that approval and registration of all food premises by the local authority prior to commencing business will become a legal requirement. In this way only can effective control of food premises be attained.

A temporary expedient in view of the infantile paralysis epidemic was the sending out of 1,500 letters to food handlers, pointing out general precautions against food infections. It is realised, however, that this is no substitute for the personal visits of the Inspectorate, which must become a routine at every place where food is stored or handled.

An instance of the value of these visits may not be out of place. The management of a large works canteen rang up the Department in desperation to know the reason for the regular and all too frequent outbreaks of diarrhœa and sickness amongst their staff. A Sanitary Inspector spent one afternoon in the canteen kitchen hammering home to the Staff the principle and practice of temperature control in the preparation and storage of foodstuffs. Two years have elapsed and there has been no similar outbreak. Other cases could be cited to show the value of regular visitations by Sanitary Inspectors.

The Milk Supply.

Complaints regarding the milk supply have been few and far between this year. It would appear that there has been a general improvement in the safety and cleanliness of the City's milk supply and also that the Safe Milk Campaign of last year served a useful purpose.

It is somewhat disappointing, however, that the resolution passed by the Council, requesting the Minister of Food to declare Salford a " specified area " for the compulsory heat treatment of all undesignated milk, in accordance with Regulation (55G) of the Defence (General) Regulations, 1939, and also that consideration should be given to the inclusion of accredited and Tuberculin Tested Milk within the scope of the provisions for the compulsory heat treatment of milk have not been put into effect. It may be that the Ministry is contemplating legislation for the whole country. It is felt that action should be taken quickly. Two thousand deaths, mainly children, and 4,000 new cases of Tuberculosis per annum in this country through drinking infected milk create still a very serious and urgent problem.

Fortunately in Salford about 98 per cent. of the milk supply is heat-treated, and there is not the same risk as in the rural districts. We are ready and waiting for 100 per cent. heat-treatment of the milk supply, and the sooner it is made compulsory the better it will be for all of us.

The Staff, &c.

The Department laboured under a serious staff shortage in the early part of the year, and as there were no qualified men available, it became necessary to seek other means of solving our problems.

Two students and two temporary assistants were engaged and proved very helpful in following up work specified on statutory notices which had accumulated from the flood and the drive for house repairs resulting from neglect of property during the war years.

A further activity which should result in helping to solve our labour problems at some future date, was the part-time training by members of the staff of ex-servicemen Student Sanitary Inspectors at the Royal Technical College, Salford. This course is still proceeding under a scheme formulated by the Ministry of Labour, Ministry of Education and the Ministry of Health, in consultation with the Sanitary Inspectors' Association and the Royal Sanitary Institute.

The full establishment is 20 Sanitary Inspectors, whereas there are only 13 Inspectors at the present time to cope with an ever-widening field of activity.

Factories Act, 1937.

1. INSPECTIONS for purposes of provisions as to health (including inspections made by Sanitary Inspectors).

Premises.	No. on Register.	Number of		
		Inspections.	Written Notices.	Occupiers prosecuted.
(1) Factories in which Sections 1, 2, 3, 4 and 6 are to be enforced by Local Authorities	80	Nil	—	—
(2) Factories not included in (1) in which Section 7 is enforced by the Local Authority	994	287	24	Nil
(3) Other premises in which Section 7 is enforced by the Local Authority (excluding out-workers' premises)	Nil	Nil	Nil	Nil
TOTAL	1,074	287	24	Nil

2. CASES IN WHICH DEFECTS WERE FOUND.

Particulars.	Number of cases in which defects were found. Found.	Remedied.	Referred To H.M. Inspector.	Referred By H.M. Inspector.	Number of cases in which prosecutions were instituted.
Want of cleanliness (S.1.)	13	13	—	5	Nil
Overcrowding (S.2)	—	—	—	—	—
Unreasonable temperature (S.3)	—	—	—	—	—
Inadequate ventilation (S.4)	—	—	—	—	—
Ineffective drainage of floors (S.6)	—	—	—	—	—
Sanitary conveniences (S.7)					
(*a*) insufficient	6	4	—	4	Nil
(*b*) unsuitable or defective	16	13	—	11	Nil
(*c*) not separate for sexes	2	2	—	2	Nil
Other offences against the Act (not including offences relating to outwork)	—	—	—	—	—
TOTAL	37	32	—	22	Nil

Outworkers.

Section 110—

Number of outworkers in August list required by Section 110 (1) (*c*)	219
Nature of work—making, etc., of wearing apparel	219
Number of cases of default in sending list to the Council	Nil
Number of prosecutions for failure to supply lists	Nil

Section 111—

Number of instances of work in unwholesome premises	Nil
Number of notices served	Nil
Number of prosecutions in respect of outworkers' premises	Nil

Statistics.

The following tables are included to give some idea of the nature and extent of the work carried out during the year and a comparison is made with last year's figures :—

Nature of Inspections.	*Totals.*	
	1947.	1946.
Sanitary Defects (roofs, gutters, drains, etc.) under Public Health Act and Housing Act	39,292	34,043
Inspections *re* Housing Applications	1,650	1,608
Sublet Houses	68	298
Seamen's Lodging Houses	36	74
Common Lodging Houses	13	54
Van Dwellings	41	72
Factories	287	65
Shops Act Inspections	64	52
Schools	98	124
Cinemas	7	35
Public Conveniences	497	596
Stables	18	29
Tips	2	6
Dairies	189	139
Milk Shops	31	160
Food Manufacturing Premises	34	27
Butchers' Shops	59	214
Fish and Chip Shops	30	35
Restaurants	10	2
School Meals Kitchens	11	12
Factory Canteens	22	28
Bakehouses	26	47
Ice Cream Shops	44	66
Ships *re* Importation of Dogs and Cats	16	13
Diseases of Animals Act Visits	6	25
Slaughterhouses and Knackers' Yards	3	23
Piggeries	11	7
Dysentery Cases	12	50
Food Poisoning	4	14
Unsound Food	573	543
	43154	38461

List of Samples Taken.

Milk for T.B. Test	360	303
,, Phosphatase Test	270	285
,, Methylene Blue Test	270	231
,, Fats and Solids-not-fats, etc.	1,190	1,275
Fertiliser and Feeding Stuffs Act Samples	8	8
Pharmacy and Poisons Act Samples	3	9
Water Supply Samples	87	49
Swimming Bath Water Samples	176	151
	2364	2311

Complaints, Notices, Letters, etc.

Complaints Received	14,866	11,385
Statutory Notices Issued	8,732	6,034
,, ,, Abated	6,425	4,818
Intimation Notices Issued	2,803	4,723
,, ,, Abated	2,826*	2,596
Priority Housing Certificates Granted	1,245	1,307

* Including Notices issued during 1946.

Cases Heard before the Magistrate.

Offence.	No. of Cases.	Decision of Magistrate.
FOOD AND DRUGS ACT, 1938 For failing to keep in a proper state of repair the ceiling of a room at a butcher's shop, and for allowing filth to accumulate.	1	Fined £10.
P.H.A., 1936 For failing to comply with the requirements of Notices under Section 93 of the P.H.A., 1936, to remedy nuisances at dwelling-houses.	74	14 fined £1 with orders to abate. 3 ,, £2 ,, ,, 17 orders to abate with 11s. 6d. costs. 2 orders to abate with 8s. 8d. costs. 38 orders to abate without costs.
HOUSING ACT, 1936 For failing to vacate premises in connection with which a Closing Order was operative.	1	Dismissed after vacation of premises.

The total number of prosecutions this year is 76 as compared with 13 last year.

MUNICIPAL CHEST CLINIC.

Annual Report for 1947.

During 1947, 1,242 new cases were referred to the chest clinics from General Medical Practitioners and other sources.

As in former years an appreciable proportion of cases referred to the clinics showed abnormality other than tuberculosis. By giving as much help as possible in diagnosis of this type of case one hopes to encourage practitioners to refer cases freely so that tubercle may be discovered in as early a stage as possible.

(*a*) Sputum Examinations.

Five hundred and seventy-two (572) samples of sputum were examined in 1947.

All sputum examinations desired by Medical Practitioners are made free of charge at the Municipal Pathological Laboratory and special sterile metal containers are provided for the collection of the specimens.

(*b*) Contacts.

In 1947, the Department continued to make a special effort to induce more contacts, especially children, to attend for examination. A single contact examination is not considered sufficient ; three monthly examination is carried out on all contacts who can be induced to attend. Nine hundred and sixty-one (961) contact examinations were made during 1947. Four of these were found to be suffering from pulmonary tuberculosis.

It will be seen that contact examination entails a large volume of work in proportion to the number of cases of tubercle found, but as tubercle is sometimes found at an early stage the work seems worth while.

(*c*) X-ray Examinations.

The X-ray equipment, consisting of a two-valve set, used chiefly for screening purposes, and a four-valve set, fitted with a Rotating Anode Tube, continue to give excellent service and the quality of the films is maintained at a high standard.

As in previous years a considerable number of pregnancy X-rays were taken for the Maternity and Child Welfare Department.

Five thousand, one hundred and nine X-ray examinations were made during 1947.

(*d*) Treatment by Artificial Pneumothorax.

This method of treatment has been carried out in all cases where it was considered that benefit could possibly accrue. There have been several cases of bilateral artificial pneumothorax.

Analysis of Cases given Artificial Pneumothorax Treatment.

During 1947, forty-nine (49) new cases commenced treatment by artificial pneumothorax, thirty-nine (39) at Ladywell Hospital, and ten (10) at Nab Top Sanatorium, seventy-five (75) patients continued their refills at the Dispensary, seventeen (17) of whom are working with completely quiescent disease. The number of artificial pneumothorax refills carried out at the Chest Clinic, Ladywell Hospital and Nab Top Sanatorium during 1947, was as follows :—

Chest Clinic	1,441
Nab Top Sanatorium	184
Ladywell Hospital	376
	2,001

(*e*) Thoracic Surgery.

During the year Mr. Graham Bryce continued to give his valuable aid as consulting Thoracic Surgeon, making monthly visits to Nab Top Sanatorium and Ladywell Hospital. In addition to his help in the surgery of tuberculosis, he has been good enough to expedite the treatment of non-tuberculous chest cases.

(*f*) Non-pulmonary Tuberculosis.

The total number of primary and informal notifications of non-pulmonary or surgical tuberculosis received during 1947 was forty-one (41), twenty-four adults and seventeen children of school age. These are made up of cases suffering from glands, bones, joints, abdomen, meninges and other forms. Many of these patients are not seen at the Chest Clinic for the first time as they are often sent direct by the General Medical Practitioners to the local hospitals for diagnosis and treatment. Others, of course, are sent in the first instance to the Chest Clinic by General Practitioners, and in the case of children some are referred by the School Medical Officers.

Cases requiring surgical treatment are usually sent by the Clinical Medical Officers to the Municipal Hospital, in some instances, having already been seen by Salford Royal Hospital. Where sanatorium treatment is likely to be of benefit the patients are sent by the Tuberculosis Officers, at the request of the Hospital Medical Officers, to Nab Top Sanatorium. When considered suitable, patients are referred for treatment at the Artificial Sunlight Clinic.

(*g*) Treatment of Tuberculous Skin Diseases.

Special arrangements have been made with the Manchester and Salford Hospital for Skin Diseases for the treatment of lupus. During the year, treatment of tuberculous skin lesions by Vitamin D2 has been continued at the Manchester Skin Hospital with gratifying results.

The number of visits paid by patients to the Skin Hospital for treatment during 1947 was two hundred and twelve (212), and the total number of tuberculous skin patients treated was eighteen (18).

All suitable cases are treated at our own Artificial Sunlight Clinic. In this way many patients, who had previously been treated at the Manchester and Salford Hospital for Skin Diseases, now attend our own Sunlight Clinic where the treatment is carried out at a much cheaper rate. During 1947, thirty-nine (39) patients have received treatment at the Sunlight Clinic with a total number of attendances of seven hundred and two (702).

TABLE 1.

Summary of Work done at the Chest Clinic in 1947.

Diagnosis.	Pulmonary.				Non-Pulmonary.				Total.			
	Adults.		Children.		Adults.		Children.		Adults.		Children.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
A. New cases examined during the year—												
(*a*) Definitely tuberculous	91	79	4	4	6	10	3	3	97	89	7	7
(*b*) Doubtfully tuberculous	...	...	...	...	...	...	...	...	22	14	5	4
(*c*) Non-tuberculous	...	...	...	...	...	...	...	...	399	412	95	91
B. Contacts examined during the year—												
(*a*) Definitely tuberculous	1	2	1	...	...	...	...	...	1	2	1	...
(*b*) Doubtfully tuberculous	...	...	...	...	...	...	...	...	...	...	...	...
(*c*) Non-tuberculous	...	...	...	...	...	...	...	...	92	162	78	102
C. Cases written off Dispensary Register as—												
(*a*) Recovered	4	2	2	...	2	2	1	2	6	4	3	2
(*b*) Diagnosis not confirmed or non-tuberculous	...	...	...	...	...	...	...	...	491	574	173	193
D. Number of persons on Dispensary Register on December 31st—												
(*a*) Diagnosis completed	448	360	33	31	30	51	61	36	478	411	94	67
(*b*) Diagnosis not completed	...	...	...	...	...	...	...	...	22	14	5	4

1. No. of persons on Dispensary Register on January 1st	1020
2. No. of patients transferred from other areas and "lost sight of" cases returned	54
3. No. of patients transferred to other areas and cases "lost sight of"	87
4. Died during the year (Dispensary cases)	126
5. No. of attendances at Dispensary (including contacts)	6175
6. No. of consultations with medical practitioners— (*a*) Others	989
7. No. of visits by Tuberculosis Officers to homes	55

8. No. of visits by Nurses or Health Visitors to homes for Dispensary purposes	3360
9. No. of— (*a*) Specimens of sputum &c., examined	572
(*b*) X-ray examinations made in connection with Dispensary work	5109
10. No. of "TB plus" cases on Dispensary Register on December 31st	368
11. No. of insured persons under Domiciliary treatment on December 31st	714
12. No. of " Recovered cases " restored to Dispensary Register	...

TABLE 2.

Showing Period elapsing between Notification and Death in Fatal Cases of Pulmonary Tuberculosis.

	Number.	Per-centage
Not notified before death	11	8·27
Notified within three months of death	24	18·04
,, from three months to one year before death	30	22·55
,, from one year to two years before death	20	15·04
Over two years	48	36·10

Total number of deaths, 133.

Ratio of non-notified cases to total fatal cases, 11—133.

TABLE 3.

New Cases and Mortality during 1947.

Age Periods.	New Cases.				Deaths.			
	Pulmonary.		Non-Pulmonary.		Pulmonary.		Non-Pulmonary.	
	M.	F.	M.	F.	M.	F.	M.	F.
0	1	...	...	2	...	...	...	2
1	1	1	3	4	1	...	2	2
5	7	1	3	2	1	...	1	...
10	2	1	2	1	...	...	1	...
15	6	21	1	...	2	3	...	...
20	17	19	4	1	7	16	1	...
25	20	28	5	4	6	16	1	1
35	25	13	1	4	17	11	...	1
45	25	6	2	...	17	4	...	...
55	25	5	1	1	18	4	...	...
65 and upwards	5	2	...	...	7	3	...	...
Totals	134	97	22	19	76	57	6	6

TABLE 4.

OCCUPATIONS OF THE 231 CASES OF PULMONARY TUBERCULOSIS NOTIFIED.

MALES.

1. Painters	3
2. Dockers	2
3. Labourers and Navvies	13
4. Clerks	3
5. Railway Workers	3
6. Makers of Wearing Apparel	6
7. Timber Trade	4
8. Mechanics and Engineering Workers	17
9. Electricians	2
10. Merchant Seamen	3
11. Post Office Workers	2
12. Ex-Armed Forces	8
13. Motor Drivers	6
14. Scholars	7
15. Miscellaneous Occupations	34
16. No Occupation	21
TOTAL	134

FEMALES.

1. Clerks and Typists	9
2. Makers of Wearing Apparel	19
3. Shop Assistants	1
4. Cotton Workers	2
5. Nurses	1
6. Housewives	30
7. Scholars	1
8. Rubber Workers	1
9. Domestics	4
10. Packers	3
11. Box Makers	1
12. Miscellaneous	17
13. No Occupation	8
TOTAL	97

During the year 1947, 41 new notifications of non-pulmonary tuberculosis have been received.

The new cases of non-pulmonary tuberculosis notified are classified in the following table :—

	Glands.	Bones.	Abdomen.	Skin.	Meninges.	Other forms.	Totals.
Under 10 years	5	2	—	—	7	—	14
10 to 20 years	2	2	—	—	—	—	4
20 to 30 ,,	1	6	1	1	1	4	14
30 to 40 ,,	—	1	1	1	—	2	5
Over 40 ,,	—	2	—	1	—	1	4
TOTALS	8	13	2	3	8	7	41

NAB TOP SANATORIUM.

Annual Report for 1947.

As in the past, Nab Top Sanatorium has been used for the treatment of early and intermediate cases of pulmonary tuberculosis. Owing to the fact, however, that Ladywell Hospital, due to shortage of staff, cannot accept their full complement of patients, we have admitted some advanced cases of pulmonary tuberculosis, who, although not likely to improve, were at least taken away from their homes, and the possibility of infecting other members of the household thus lessened. At present there are only eight (8) beds in the institution for children, and as these are all in one Ward and the sexes have to be mixed, only children up to the age of nine years can be admitted. There are no facilities, therefore, for admitting doubtfully tuberculous children, or delicate children who would benefit by removal from a household in which there is serious open infection.

During 1947 an assistant occupational therapist was appointed and thus more time is being devoted to bed patients. The occupational therapist also looks after the education of the children in the Sanatorium.

During the year Occupational Therapy Classes were continued at the Nab Top Sanatorium and provided diversional therapy for the patients. The attendance at these classes was very satisfactory ; there being an average attendance of 26 male and 12 female patients each session.

The classes are held Monday to Friday for adults, and as there is only one room available for this purpose, the lack of suitable accommodation proved a handicap. In order to overcome this difficulty the women attend in the morning and the men in the afternoon, while each Saturday the room is used by the children.

The ability to obtain materials has become increasingly difficult but leather work, rug making and embroidery proved the most popular crafts. Owing to the shortage of materials the work produced was both limited in quality and quantity but it is hoped that in the future, supplies will be more plentiful and thus enable the range of articles made to be appreciably extended.

The new portable X-ray set, used in conjunction with a vertical screening stand, continues to give satisfactory results and is vastly superior to the old plant which had become quite inefficient.

The following tables give figures as to the work carried out at Nab Top Sanatorium during the year.

TABLE A—(Nab Top Sanatorium).

SHOWING THE NUMBER OF ADMISSIONS, ETC., AND THE NUMBER OF " PATIENT-DAYS " DURING THE YEAR 1947.

	Total Adults.		Children under 15.			Totals.		
	Males	Females	Males	Females	Both	Males	Females	B
Number of Patients admitted prior to 1947 who remained in Sanatorium for some part of 1947	40	15	2	1	3	42	16	
Number of " Patient days " in 1947 for patients admitted prior to 1947 who remained in Sanatorium for some part of 1947	6006	2500	324	365	689	6330	2865	9
Total admissions, 1947	56	46	2	1	3	58	47	
Total discharges and deaths, 1947	73	36	3	—	3	76	36	
Number of "Patient-days" for persons admitted during 1947	7013	6713	206	79	285	7219	6792	1
Total number of " Patient-days " for 1947	13019	9213	530	444	974	13549	9657	2
Average number of patients in Sanatorium each day during 1947	35·7	25·2	·6	·2	·8	36·3	25·4	

NOTE.—The term " Patient-days " represents the product of the number of patients the number of days spent by those patients in the Sanatorium.

The following tables give figures as to the work carried out at Nab Top Sanatorium during the year.

TABLE B.—PATIENTS DISCHARGED FROM NAB TOP SANATORIUM DURING 1947.

	Condition at Time of Discharge.	Duration of Residential Treatment in Institution.											
		Under 3 Months, but exceeding 28 days.			3 to 6 Months.			6 to 12 Months.			Over 12 Months.		
		M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.
Pulmonary Tuberculosis	Quiescent............	...	...	...	1	1	...	3	1	...	...	2	1
	Not Quiescent......	12	5	...	28	12	1	12	4	1	4	3	...
	Died	1	1	...	2	2	...	3	1	...	...	1	...
	TOTALS	13	6	...	31	15	1	18	6	1	4	6	1
Non-Pulmonary Tuberculosis	Quiescent............	...	...	...	...	...	...	...	...	...	...	...	...
	Not Quiescent......	...	...	...	...	...	...	...	...	...	...	...	...
	Died	...	...	...	...	...	...	...	...	...	...	...	...
	TOTALS	...	...	...	...	...	...	...	...	...	...	...	...
								Under 4 weeks.			Over 4 weeks.		
Observation for Purposes of Diagnosis	Tuberculous.........................							...	...	...	...	...	...
	Non-Tuberculous.................							...	...	...	...	...	...
	Doubtful............................							...	...	...	...	...	...

LADYWELL HOSPITAL (TUBERCULOSIS SECTION).

Annual Report for 1947.

The tuberculosis blocks at Ladywell Hospital are still used for the most part for advanced cases of pulmonary tuberculosis. Owing to the shortage of Nursing and Domestic staffs, now approximately only fifty (50) beds out of seventy-two (72) have been available. Even this reduced number has thrown a very considerable strain on the Nursing staffs concerned.

The tuberculosis blocks at Ladywell Hospital, originally designed for advanced cases, are now used a good deal for induction of A.P. in patients who are only retained in hospital a short time, being discharged once the pneumothorax is established.

This policy has been adopted so that patients who are suitable may have the benefit of early collapse therapy instead of being kept on a waiting list for ordinary sanatorium treatment.

A number of moderate or early cases of pulmonary tuberculosis accompanying pregnancy or illness of a non-tuberculous nature have been treated in the Ladywell Wards.

LADYWELL HOSPITAL.

Table showing the Number of Admissions, etc., and the Number of " Patient-days " for 1947.

Tuberculosis Cases.

	Males.	Females.	Totals.
Total Number of Admissions during 1947...	82	83	165
Number of Persons Admitted prior to 1947 who remained in Hospital for some part of 1947	20	13	33
Total Number of Discharges and Deaths during 1947	81	79	160
Patients in Hospital on the 31st December 1947	21	17	38
Number of " Patient-days " for Persons Admitted during 1947..........	5916	4250	10166
Number of " Patient-days " (in 1947) for Persons admitted prior to 1947 who remained in Hospital for some part of 1947	2518	1702	4220
Total Number of " Patient-days " for 1947	8434	5952	14386
Average Number of Patients in Hospital each day during 1947..........	23·1	16·3	39·4

Mass Miniature Radiography Scheme, Salford, 1947.

A summary of the findings at the examinations conducted during the year is appended :

	Males.	*Females.*	*Total.*
Total radiographed	1,453	336	1,789
Total passed on miniature film	1,342	310	1,652 = 92·34%
Total recalled for full-size film	111	26	137 = 7·66%
Total recalled for clinical examination	63	9	72 = 4·02%

Those who were passed on the miniature film required no further action. The 137 who were recalled for a full-size film were those whose miniature film suggested some abnormality which was considered to require further investigation. An analysis of these is given in the following tables.

MASS MINIATURE RADIOGRAPHY—SALFORD, 1947.

Ministry of Health Classification Number.	TITLE	Classified on miniature (35 mm.) films. (No further action).			Recalls for full size film.						Totals.
					Not followed by recall for clinical examination or interview. (No further action).			Followed by recall for clinical examination and interview. Analysis appended.			
		Males	Females	Total	Males	Females	Total	Males	Females	Total	
1	Congenital abnormalities of bony thorax and lungs	2	...	2	1	...	1	1	...	1	4
2	Chronic bronchitis and emphysema	...	...	...	...	...	...	9	1	10	10
3	Pneumonia, lobar	...	...	...	...	...	...	...	...	...	...
4	Broncho-pneumonia (non-tuberculous) (including primary atypical)	...	...	...	...	...	...	...	...	...	...
5	Consolidation of unknown origin	...	...	...	...	...	...	...	...	...	...
6	Bronchiectasis	...	...	...	...	...	...	3	...	3	3
7	Pulmonary fibrosis (non-tuberculous, *e.g.*, post-pneumonic)	...	...	...	...	...	...	...	...	...	...
8	Pneumokoniosis (silicosis, asbestosis, coal-miner's pneumokoniosis)	...	...	...	...	...	...	2	...	2	2
9	Pneumokoniosis accompanied by tuberculosis	...	...	...	...	...	...	...	...	...	...
10	Basal fibrosis (*e.g.*, obliterated costo-phrenic angle and diaphragmatic tenting)	...	...	...	...	...	...	...	...	...	...
11	Pleural thickening	23	1	24	6	...	6	3	...	3	33
12	Pleural and interlobar effusion (non-tuberculous)	...	...	...	...	...	...	...	...	...	...
13	Spontaneous pneumothorax (non-tuberculous)	...	...	...	...	...	...	...	...	...	...
14	Intrathoracic new growth (mediastinal, pulmonary, bronchial and pleural, primary and secondary both benign and malignant)	...	...	...	...	...	...	2	...	2	2
15	Cardio-vascular lesions—congenital	...	...	...	...	...	...	1	...	1	1
16	Cardio-vascular lesions—acquired	...	...	...	...	...	...	8	...	8	8
17	Miscellaneous (including acquired conditions of ribs, abnormalities of the diaphragm, dextrocardis, dextrocardis with transposition of viscera, pulmonary mycosis, mediastinal effusions)	...	...	...	...	...	...	5	1	6	6

Ministry of Health Classification Number.	TITLE	Classified on miniature (35 mm.) films. (No further action).			Recalls for full size film.						Totals.
					Not followed by recall for clinical examination or interview. (No further action).			Followed by recall for clinical examination and interview. Analysis appended.			
		Males	Females	Total	Males	Females	Total	Males	Females	Total	
18	Missing repeat 35 m.m. films	...	...	...	...	...	...	...	...	...	...
19	Missing large films, i.e., failed to attend	...	...	...	1	1	2	...	...	...	2
20	Tuberculosis—active primary lesions, including epi-tuberculosis—										
	(*a*) With symptoms	...	...	...	...	...	...	...	...	...	...
	(*b*) Without symptoms	...	...	...	...	...	...	...	...	...	...
21	Tuberculosis—inactive primary lesions (*e.g.*, Ghon's focus and/or calcified gland)	8	4	12	5	3	8	...	...	...	20
22	Tuberculosis—active, post-primary unilateral										
	(*a*) With symptoms (previously known)	...	...	...	...	...	...	...	...	...	...
	(newly discovered)	...	...	...	...	...	...	4	1	5	5
	(*b*) Without symptoms (previously known)	...	...	...	...	...	...	...	...	...	...
	(newly discovered)	...	...	...	...	...	...	...	...	...	...
23	Tuberculosis—active, post-primary bilateral										
	(*a*) With symptoms (previously known)	...	...	...	...	...	...	1	...	1	1
	(newly discovered)	...	...	...	...	...	...	1	...	1	1
	(*b*) Without symptoms (previously known)	...	...	...	...	...	...	...	...	...	...
	(newly discovered)	...	...	...	...	...	...	...	...	...	...
24	Tuberculosis—inactive, post-primary—										
	(*a*) Previous known cases	...	...	...	...	...	...	2	1	3	3
	(*b*) Previously unknown cases	...	...	...	12	3	15	19	1	20	35
	Tuberculosis—doubtfully active, still under observation	...	...	...	...	...	...	...	2	2	2
25	Tuberculosis—pleural effusion	...	...	...	...	...	...	...	...	...	...
26	Tuberculosis—spontaneous pneumothorax and hydropneumothorax	...	...	...	...	...	...	...	...	...	...
30	Abscess of lung	...	...	...	...	...	...	...	...	...	...
	Passed as " normal "	1,309	305	1,614	23	10	33	1	2	3	1,650
	Failed to attend for clinical interview	...	...	...	...	...	...	1	...	1	1
	TOTALS	1,342	310	1,652	48	17	65	63	9	72	1,789

An analysis of the 32 cases of pulmonary tuberculosis recalled for clinical examination and interview by the Radiography Unit Medical Officer shows that :—

(*a*) In seven instances the disease was regarded as being active, one being a previously known case. Five were resident in the Salford area.

The remaining six were newly discovered cases all of whom were advised to attend their private medical practitioners with a view to securing their reference to the individual residential area Tuberculosis Officer. With the consent of the person concerned, a special letter was sent in every instance to the practitioner, giving particulars of the clinical and radiological findings, and asking that the case be referred.

Of these six, three were recommended for, and accepted institutional treatment. Three were not considered to require institutional care, and were advised to keep under supervision at the Clinics.

Sputum was positive for tubercle bacilli in one instance, and supervision at the Clinic was recommended in preference to institutional treatment, for psychological reasons.

(*b*) In 23 instances the disease was regarded as being inactive, 17 of whom were resident in the Salford area. Of these 23, three were previously known cases. Twenty-one were regarded as being inactive following observation at the Tuberculosis Clinics. The remaining two failed to avail themselves of the advice given relative to their attendance for observation.

(*c*) In two instances the activity of the disease was regarded as being doubtful and attendance at the Tuberculosis Clinics for observation was advised in the manner previously mentioned. In all such instances decisions will be notified to the Radiography Unit by the Tuberculosis Officers as, and when, they are made.

In the cases of other various diseases and abnormalities where, after the initial clinical examination by the Unit Medical Officer, treatment was considered to be indicated, the individual was advised to consult his private medical practitioner to whom was sent, with the patient's consent, a full report on the clinical and radiological findings.

LADYWELL HOSPITAL.

Report for the Year 1947.

This year will be remembered by all on account of the Poliomyelitis epidemic. It occurred during the summer holiday months and put a severe strain on the depleted staff. One hundred and thirteen cases were admitted, of which eight proved fatal—see details on pages 47 and 48.

At the beginning of the year there were 94 patients in hospital ; these, with the 1,363 admitted during the year, made a total of 1,457 cases under treatment. Of this total, 1,268 were discharged, 107 died, and 82 were in hospital at the end of the year. The number of cases treated, 1,457, compares with 1,117 in 1946, and with 1,575·6 the average number of cases treated for the previous five years, 1942-1946.

The cases treated were as follows :—

Scarlet Fever	284
Mixed infections	34
Measles	167
Enteric Fever	1
Diphtheria	36
Erysipelas	22
Puerperal Fever	21
Tuberculosis	200
Other diseases	692
	1,457

The number of cases admitted from *Out-districts was 303 (Poliomyelitis 64) as compared with 219 in 1946. The daily average number of patients in 1947 was 103·8, the highest being 126 on 3rd March, and 6th November, and the lowest 81 on four days in June. The daily average number of Out-district patients was 16·0 compared with 16·5 in 1946, and with 29·6 for the previous five years 1942-1946. One thousand, three hundred and sixty-three patients were admitted during the year as compared with 990 in 1946 and with 1,436·2, the average for the previous five years 1942-1946.

* Eccles, Stretford, Urmston, Irlam, Farnworth, Manchester Port Sanitary Authority and Service patients.

The following summary shows the diagnosis of the cases before admission and after observation in hospital :—

	Diagnosis before admission.	*Diagnosis after observation.*
Scarlet Fever	302	271
Mixed infections	24	34
Measles	163	157
Enteric Fever	7	1
Diphtheria	150	32
Erysipelas	24	21
Puerperal Fever	21	18
Tuberculosis	165	167
Other diseases	507	662
	1,363	1,363

Mixed Diseases.—Twenty-eight of the patients discharged were found to be suffering from two distinct diseases as follows :—

Bronchitis and Enteritis	1
Scarlet Fever and Chicken Pox	2
Measles and Chicken Pox	4
Measles and Whooping Cough	6
Scarlet Fever and Impetigo	1
Measles and Scabies	1
Bronchitis and Gastro-Enteritis	2
Whooping Cough and Gastro-Enteritis	1
Scabies and Impetigo	1
Tonsillitis and Chicken Pox	1
Septic Abortion and Rubella	1
Puerperal Sepsis and Syphilis	1
Asthma and Bronchitis	1
Tonsillitis and Diphtheria (carrier)	1
Poliomyelitis and Mumps	1
Poliomyelitis and Chicken Pox	1
Rheumatism and Bronchitis	1
Whooping Cough and Enteritis	1
	28

The average stay in hospital for all Mixed Diseases cases discharged well in 1947 was 28·4 days.

Deaths from Mixed Diseases.—There were four deaths :—

Boy aged five months : Bronchitis and Enteritis. In hospital seven days.

Boy aged 17 months: Whooping Cough and Measles. In hospital six days.

Boy aged eight weeks: Whooping Cough and Gastro-Enteritis. In hospital nine days.

Girl aged four months: Impetigo and Gastro-Enteritis. In hospital 25 days.

Cross Infection.—The cubicle block has been very busy. Five hundred and eighty-four cases were admitted into the two wards of the cubicle block during the year as against 489 last year.

Ten patients were discharged in 1947 who contracted another infection as follows:—

Sent in as:		*Secondary infection:*	
Scarlet Fever	7	Measles	7
Whooping Cough	1	Mumps	1
Measles	1	Whooping Cough	1
Whooping Cough	1	Measles	1
	10		10

The average stay in hospital for all cross-infected cases discharged well in 1947 was 39·9 days.

The average stay in hospital for all cases discharged well in 1947 was: for Scarlet Fever 27·7 days; for Mixed Infections 28·4 days; for Measles 17·5 days; for Diphtheria 36·2 days; for Erysipelas 16·3 days; for Puerperal Fever 20·1 days; for Tuberculosis 83·4 days; for other diseases 20·8 days.

Deaths.—The total number of fatal cases in 1947 was 107, as follows:—

Mixed Infections	4
Measles	3
Erysipelas	1
Tuberculosis	52
Acute Peritonitis	1
Broncho-Pneumonia	3
Cerebral Hæmorrhage	1
Diverticulitis, congenital heart disease	1
Gastro-Enteritis	22
Marasmus	1
Pneumococcal Meningitis	1
Poliomyelitis	8
Streptococcal Tonsillitis	1
Tuberculous Meningitis	2
Whooping Cough	6
	107

The average stay in hospital for all fatal cases excepting advanced Tuberculosis was 12·0 days ; the average stay for advanced Tuberculosis cases was 85·2 days.

The daily average number of patients in hospital in 1947 was 103·8, by a coincidence, the same as in 1946 ; the daily average for the five years 1942-1946 was 140·5.

During the year, patients were admitted from other hospitals as follows :—

Hope Hospital	78
Salford Royal Hospital	65
Park Hospital	24
Eccles and Patricroft Hospital	5
Stretford Memorial Hospital	3

There were remaining in hospital on 31st December, 1947, 82 patients as compared with 94 last year. The cases remaining were : Scarlet Fever 22 ; Mixed Infection 2 ; Tuberculosis 40 ; other diseases 18.

DETAILED INFORMATION ABOUT SOME DISEASES.

Scarlet Fever.

The number of cases admitted was 271 as against 185 in 1946. Three hundred and two were certified as having Scarlet Fever, but in 36 cases the diagnosis had to be revised ; in addition, two cases admitted as Mixed Infections, two as Diphtheria and one Measles proved to be Scarlet Fever. Two hundred and sixty-two cases were discharged well during the year as against 199 last year. There were no fatal cases.

The type of the disease was mild. Scarlatinal antitoxin was given intramuscularly in 3,000-9,000 unit doses to all but the very mildest cases. In addition, some sulphonamide was given invariably, and Penicillin whenever condition indicated. The more important complications were as follows :—

	Cases affected.	*Percentage of discharged cases.*
Adenitis	6	2·3
Otorrhœa and Otitis Media	10	3·8

Other complications were as follows :—Albuminuria 2 ; Impetigo 2 ; Relapse 1 ; Rhinitis 2 ; Tonsillectomy and acute Mastoiditis 1.

Seven cases contracted another infection whilst in hospital—Measles 7.

The average stay in hospital for all cases discharged well was 27·7 days.

Ten patients were immunised against Diphtheria, receiving two doses of A.P.T. ; in addition, seven patients received one dose of A.P.T.

Diphtheria.

This disease has shown a very marked decline, no doubt as a result of immunisation ; whereas, formerly, two wards and sometimes three were always fairly fully occupied, now the few admissions of sore throats are accommodated in the Cubicle Block. A genuine Diphtheria is not often to be seen now ; bacteriological investigation reveals frequently a streptococcal, Vincent's or other infection. Of the 150 admitted as Diphtheria, only 32 proved to be such.

One hundred and fifty cases were admitted certified as Diphtheria, but in 118 cases the diagnosis had to be revised, 103 proving to be Tonsillitis and 15 to be other diseases. In seven of the most severe cases, part of the antitoxin was given intravenously, in some instances repeatedly ; sulphonamides and Penicillin were also given.

There were no deaths from this disease.

Of the 36 discharged cases, 28 were faucial, two laryngeal, one faucial and laryngeal, one nasal. There were also four cases of bacteriological Diphtheria ; one of these had otitis media. Penicillin was used as a spray for carriers.

Poliomyelitis.

Figures for 1947 (June to December 31st).

Admitted.		*Ages.*	*Males.*	*Females.*	*Total.*
Salford	49	Under 1	2	1	3
Eccles...........	33	1-5	40	26	66
Urmston	11	6-10	9	3	12
Irlam............	7	11-15	3	9	12
Stretford	5	16-20	4	4	8
Farnworth	5	21-25	4	3	7
Worsley	1	26-30	2	3	5
Prestwich......	1				
Pendlebury....	1				
	113		64	49	113

On admission, a history of a feverish illness was generally obtained, lasting one day to over one week ; children were fretful, resented being touched and were unfriendly.

Of the 113—94 had some kind of paralysis : 23 mild, 17 moderate, 54 severe ; of which eight died—Salford 3 ; Eccles 3 ; Farnworth 1 ; Stretford 1.

Average stay of fatal cases was 3·4 days, and of discharged cases, 25·7 days.

Lumbar Puncture was performed in 79 cases, the pressure found raised in 76 cases, whilst the white cell count was increased in 53 cases.

Nine cases were treated in a respirator.

Ladywell had a " Bragg-Paul " and a " Both " respirator, but had to borrow another " Both " from Salford Royal Hospital. Treatment in a respirator makes severe demands on the staff.

The bladder was paralysed in 11 patients. Several had to be catheterised repeatedly.

Treatment of paralysed limbs consisted in passive movements and massage (by Masseuse). Advice was given by Orthopædic Surgeon and Neurologist.

After an isolation period of about three weeks, patients requiring further treatment (in all 59) were moved to an Orthopædic Hospital—

Hope Hospital	16
Park Hospital	4
Booth Hall	1
Biddulph	38

the others discharged home when fit.

Most patients showed much improvement in a few days, became bright and friendly, lost their fever and their appetites improved ; muscles showed increased power and the general activity improved.

Puerperal Fever.

Twenty-one cases were admitted under this diagnosis, but one proved to be Septic Abortion and two Tonsillitis. The 21 cases discharged were all classified as " Puerperal Sepsis." Average stay in hospital 20·1 days.

There were no fatal cases.

Complications in the discharged cases—Phlegmasia alba dolens and Tonsillitis 1 ; Empyema right pleura 1.

There were 13 babies admitted with their mothers.

Erysipelas.

Twenty-four cases were admitted as Erysipelas during the year, but in three cases the diagnosis had to be revised, viz. :—Impetigo 2 ; Orbital Cellulitis 1 (transferred to the Eye Hospital). The average stay in hospital for the discharged cases was 16·3 days.

Complications.—Herpes ophthalmicus 1 ; Abscess leg (incision) 1 ; Cellulitis (incision) 1 ; Otorrhœa 1.

There was one fatal case—a woman aged 74, in hospital 10 days.

Measles.

One hundred and sixty-three cases were admitted during the year as Measles, but of these, 4 proved to be Mixed Infections; 1 Scarlet Fever and 18 other diseases. In addition, 4 Scarlet Fever, 10 other diseases, 1 mixed infection, and 2 Diphtheria, proved to be Measles.

There were three fatal cases: ages 18 months, 17 months and 7 months.

The average stay in hospital for the discharged cases was 17·5 days, and for the three fatal cases 23·7 days.

Complications of the discharged cases: Broncho-pneumonia 12; Adenitis 4; Otorrhœa 6; Prolapse rectum 2; Eczema 1; Rhinitis 1; Bronchitis 3; Axillary abscess 3; Enteritis 2; Albuminuria 1; Stomatitis 1; Scabies 1; Gastro-Enteritis 2.

Whooping Cough.

Seventy-four cases were certified as Whooping Cough but only 61 of these were confirmed. In addition, two Mixed Infections, one Measles and two other diseases, proved to be Whooping Cough. Ten patients, including two fatal, had Whooping Cough in association with another disease. There were six fatal cases, the ages being 7 months, 22 months, 13 months, 16 months, 5 weeks, and 6 weeks.

The average stay in hospital for the discharged cases was 36·1 days; the average stay for the six fatal cases was 25·6 days.

Staff.

On 31st December, 1947, the resident staff of the Hospital consisted of the following:—

Medical Superintendent	1
Assistant Medical Officer	1
Matron	1
Assistant Matron and Home Sister	1
Sister Tutor	1
Housekeeping Sister	1
Night Sister	1
Ward Sisters	6
Staff Nurses	3
Assistant Nurses	4
Student Nurses	15
Cook	1
Assistant Cook	1
Domestics	11
Lodge Porters	2
	50

The non-resident staff consisted of :—

Tuberculosis Officer	1
Clerk	1
Assistant Clerk	1
Assistant Nurses (male)	2
Ward Orderlies (male)	3
Assistant Nurses (female)	7
Ward Orderlies (female)	4
Staff Nurses (female)	2
Engineer	1
Joiner	1
Plumber	1
Gardener	1
Garden Labourers	2
Boiler Firemen	3
General Porters	8
Night Porter	1
Dressmaker	1
Seamstresses	2
Cleaners	15
	57

The staff, both nurses and maids, are tested on entering by the Schick and Dick tests and, if positive, immunised against Diphtheria and Scarlet Fever. Fifteen were Schick tested and one was positive ; after inoculation with three doses of Toxoid Antitoxin floccules at fortnightly intervals, a retest proved to be negative. Seventeen were tested by the Dick test ; fourteen were negative, the remaining three left. Twenty of the staff were inoculated against Typhoid Fever.

ACUTE ANTERIOR POLIOMYELITIS.

During the epidemic of acute anterior poliomyelitis which swept the country in the late summer and autumn, 48 cases occurred in Salford between 1st August and 30th November. Several weeks previous to the notification of the first Salford case on 1st August, there had been a number of cases in the adjoining borough of Eccles and all Medical Practitioners in the City had been warned of the likelihood of cases occurring in this area.

The first case was notified by the Coroner's Officer on 1st August. This was a school girl aged eight years, resident quite close to the boundary line between Salford and Eccles, who had died the previous day, after an illness of three days' duration. The illness was characterised by headache, vomiting and extreme restlessness. A post mortem examination showed the cause of death to be Acute Anterior Poliomyelitis. The child had had contacts in Salford and Eccles none of whom had shown any signs of illness or subsequently developed any illness.

Within a week, two more cases were notified and confirmed, one from Broad Street and one from Regent Ward. There was no history in either of these cases of contact with any known case of poliomyelitis.

The fourth case notified was that of a boy aged three years who lived in the Broughton area. He was notified from the Out-patient Department of the Manchester Children's Hospital, and four days later, a playmate of his was found to be suffering from the disease. The father of this second boy was employed in a bakery in Eccles. The two children came into very close contact with each other daily.

By the end of August, 13 cases were notified and confirmed. During September there were 18 cases, in October 15 cases, and in November only four.

Cases occurred in all areas of Salford and there was no evidence of direct spread across the City.

Four of the total number of 48 cases which occurred were fatal, the fatal cases being a baby aged 5 months, a boy aged 3½ years, a girl aged 8 years and a married woman aged 26 who was four months pregnant.

Twenty-seven (56·2 per cent.) of the patients affected were under the age of five, 13 were of school age, four between the ages of 15 and 20, and four were over 20.

Thirty cases recovered completely. The remaining 14 recovered but were left with some form of paralysis.

As it became evident that the number of cases occurring in the City was increasing, it was decided to take the following precautions :—

1. All operations for removal of tonsils and adenoids at Hope Hospital were postponed until further notice.
2. The Baths Committee were requested to exclude from swimming baths in Salford, children under the age of 15 years.
3. The Town Clerk was notified that it was desirable that children under the age of 15 years should not be admitted to cinemas, and as a result, the authorities of all places of public entertainment were requested to exclude such children and to accept the restriction willingly in the public interest.
4. On 12th August, it was ascertained that a child who had been attending Howard Street Day Nursery was definitely suffering from the disease, and the Nursery was closed.
5. The attendances of children at Child Welfare Centres was considerably restricted.
6. Arrangements were made with the Director of Public Cleansing to spray all dustbins with a solution of D.D.T. Arrangements were also made for spraying stables in the City by the Staff of the Health Department.
7. Close contact was maintained with the general medical practitioners in the City, and a circular letter was sent to all doctors giving particulars of the symptoms of the disease.
8. Supervision of contacts of confirmed and doubtful cases was carried out by the Health Visiting Staff of the Department.

I should like to record here my appreciation of the co-operation accorded by all concerned in the efforts made to prevent the spread of this disease.

Problem Families.

No less than 60 families were assisted during the year. Twenty families were referred to the Family Service Unit during the year and I am glad to be able to report that in 14 of the cases the visiting has ceased as the cases are satisfactorily closed.

The major proportion of those families assisted can be described as serious " Problem Families " and have been visited frequently and considerable intensive help has been given. The approach has been comprehensive and an attempt has been made to deal with the whole family and all their problems as far as seems necessary. The mobilisation of resources, co-operation with other social agencies, the changing of environment, the utilisation of specialist services, material assistance and practical help has been essential, but fundamental to the service has been the relationship between the unit worker and the family which is based on friendship.

Most of the families assisted are large and a particular interest is taken in the children. School attendance is followed up and health is watched and it has been often necessary to escort children to clinics and hospitals. In addition, holidays and outings are arranged for them.

It can be said that in a high proportion of those cases assisted by the unit there has been an improvement in standards and changes in habits and attitudes have been effected. Consequently the danger of child neglect has been lessened. It will be noted that 14 of the families assisted during the year have reached such a satisfactory level that the unit has been able to withdraw and the family have continued to be self-directing. In other cases only occasional visits have been necessary.

The unit has enjoyed very close co-operation with all departments of Salford Corporation.

Home Safety.

The importance of home safety is little regarded. We must frankly face the fact that the average parent does not realise the costly toll of child life through preventable accidents. The prevention of accidents is part of preventive medicine ; for if it be preventive medicine to avoid danger to life from diphtheria, it is preventive medicine also to avoid danger to life in the home.

In 1945, in England and Wales, home accidents caused the deaths of 1,548 children under five years of age.

According to the latest information available for England and Wales for 1946, burns and scalds caused the deaths of 186 children under five ; suffocation in cot, cradle or bed, by food or rubber teat or otherwise accounted for the deaths of 751 children in this age group—an appalling total ! For some obscure reason, suffocation caused twice as many boys' and girls' deaths.

Two examples may be quoted to illustrate how several factors contributed to fatal accidents.

(1) Two children were put to bed one night ; the room was not ventilated. The father, a publican, had stoked up a central heating appliance late at night; the fumes ascended and, through defective brickwork, entered the flue from the children's bedroom. As it so happened, curious atmospheric conditions forced a down draught and the carbon monoxide fumes, instead of being dispersed in the air, were forced into the children's bedroom. Without any warning noise having been given, both children were discovered dead the following morning.

(2) A mother left a jar of hot fat on the kitchen table ; she made a few steps into the next room, heard a scream from her 18-months-old toddler who had pulled the tablecloth—her baby was dead in five hours.

In the most regrettable and alarming increase of deaths through suffocation by feeding, it strikes the Public Health worker at once that these accidents would not have occurred had nature's way of breast feeding been followed. Whenever we depart from nature, sooner or later we incur a risk, unless ample vigilance and preventive measures are taken to avoid the accident.

Remedies.

IF ONLY all babies slept in a separate cot ; if they *all* had a hard pillow ; if there were a fireguard before all fires ; if all spouts and handles were turned in ; if teapots, and pans of hot fat were out of reach of little fingers ; if only there were wooden gates to dangerous stairs where children are ; if the gas taps had bayonet fittings ; if poison bottles had screw caps and were clearly labelled and out of reach of little fingers ; if electric fittings were modern and free from damp, dust and danger ; and last, but by no means least, if only parents could set a good example, precious lives would be saved.

Of course, we must teach the parent about home safety. One of the best ways will be by an increase in the adequacy of Health Visiting Service. We must give much more detailed teaching to mothers ; old methods of mass teaching in groups and clinics have their part still to play but there is so much teaching required on many aspects of child care that little good will be done without a big increase in the number and quality of Health Visitors to teach in the home to show the mother how she can manage better, using the existing kitchen range and the defective tools with which she has to do her job.

ANNUAL REPORT OF THE CITY PATHOLOGIST, 1947.

The appended table gives a list of the examinations carried out at the City Public Health Laboratory during 1947. A total of 27,266 specimens was examined, including 247 from the Boroughs of Prestwich, Eccles, Whitefield and Stretford. The total number of specimens is equivalent to 61,532 pathology units. In addition, as shown in the report from the Clinical Pathology Laboratory, Hope Hospital, work equivalent to 139,131 pathology units was performed there. This gives a grand total of 200,663 units for both laboratories.

Food Poisoning.

There were no major outbreaks during the year.

In May, an outbreak of diarrhœa and vomiting following a midday meal at the canteen supplying the Gas Department occurred and was investigated by this Department.

No organisms were isolated from the fæces nor were any of pathological significance found in the items which remained over. All persons affected made a quick uneventful recovery.

Also during May, a sample of meat paste was submitted by a Salford resident who had purchased it in Manchester and after eating it developed severe sickness and diarrhœa. Examination of the paste showed numerous coagulose positive, " Stone Reaction " positive staphylococcus aureus. In view of this, further investigation was carried out by the Manchester Authorities who found eight similar cases in Manchester, all having purchased and eaten the meat paste in question. Further enquiries traced the meat back to the makers in Ipswich and revealed that it had been widely distributed over the country. Numerous cases of illness due to consumption of the paste had been reported from various parts of the country, and as a result of this the paste had been examined by the Ministry of Health Laboratories who had isolated an organism similar to the staphylococcus mentioned above and withdrawn the paste as far as lay within their power.

No further outbreaks of food poisoning were reported.

Towards the end of the year a number of specimens were examined in respect of a minor outbreak of diarrhœa at a Day Nursery. No pathological organisms were isolated from any of the specimens. It is suspected that this might have been a mild outbreak of epidemic virus diarrhœa which is still occurring in the area.

Dysentery.

The fall in the number of cases from which dysentery organisms have been isolated during the past three years has been remarkable.

There were 60 cases in 1946 as opposed to approximately 120 in 1945.

In 1947 only one case of dysentery was detected. This occurred in the stool of a child who had been away at a convalescent home where several cases of diarrhœa had occurred but had not been investigated. The Local Health Authorities in question were notified of our findings.

Water Examination.

The appended table gives the results of examinations carried out on the Salford water supplies during the year.

The results of examinations on the water supply to the Pendleton area of the City, drawn from the Thirlmere Reservoir, were very satisfactory throughout the year and samples taken never fell below the high standard laid down by the Ministry of Health.

The results on the supply to the Regent Road-Crescent area, drawn from the Longdendale Reservoirs, failed to maintain this standard throughout the year. In the warm summer months, and for a period following this (probably due to the water maintaining a higher temperature than the outside air), coliform organisms were present in samples taken.

In view of these results, a more intensive watch was kept on this supply and on its two sources of entry into the City, i.e., Blackfriars and Prince's Bridge. Samples were taken in triplicate (two from house taps and one from the main) in order to eliminate the possibility of contamination due to faulty sampling, etc., and samples were taken in rotation from both points of entry.

Over the period of these results the number of coliform organisms present in 100 m.l. ranged from 0 to 13, but fæcal types were never present amongst them. So far as could be ascertained efficient chlorination had been maintained and, in fact, on one occasion one part per million of residual chlorine was present and coliform organisms were still found ; a result confirmed by Manchester Waterworks Laboratory.

This is somewhat at variance with some authorities, who state that with residual chlorine in the water coliform organisms should be absent. In this case, however, the supply suffers through having no filtration system, and it is possible that suspended matter in the water interferes and renders slower the action of the chlorine.

The problem with this supply is the fact that although chlorine is added to the limits which allow it to be undetectable by taste it very often does not bring the coliform count low enough to conform to the Ministry of Health standards, and until a filtration system is added it would seem that little can be expected in the way of improved coliform counts during warm weather.

As stated before, the coliform organisms encountered have not been found to contain fæcal types, and as the water has been drawn from a safe gathering ground, there appears to be no undue cause for alarm, although it is disconcerting not to be able to bring the results within Ministry of Health standards during the summer months of the year.

I understand the Manchester Waterworks have made the improvement of this supply one of their first commitments when conditions allow the work to be put in hand.

Swimming Baths.

The appended table gives the results of bacteriological examinations of swimming bath water during 1947.

Good = Bacterial count under 1,000 per m.l. ...... 0 B. Coli per 100 m.l.
Fair = ,, ,, 1,000 to 3,000 per m.l.... 1–5 ,, ,,
Bad = ,, ,, over 3,000 per m.l........ over 5 ,, ,,

As pointed out in the Hope Hospital report, laboratory accommodation there has become very cramped and is interfering with the previous reasonably rapid turnover of the work sent to the laboratory. As a result of this, quite a number of the patients are detained in hospital longer than they should be while awaiting the results of pathological investigation. When suitable premises are found and equipped it will probably result in a definite shortening of the average stay per patient in hospital.

EXAMINATION OF SWIMMING BATH WATER.

Bath.	Good.	Fair.	Bad.	Total.
Seedley, 1st Class....................	17	4	...	21
,, Ladies	18	1	6	25
,, 2nd Class	16	2	4	22
Blackfriars, Male	10	7	6	23
,, Female.................	12	3	3	18
Pendleton, Large	11	...	...	11
,, Small	11	...	2	13
Regent Road, Male	14	5	3	22
,, Female	12	4	5	21
	121	26	29	176

Tests carried out on Water Samples in the Pendleton and Regent Road Districts.

	Pendleton Area.			Regent Road-Crescent Area.			
	Count at		B. Coli. per 100 m.l.		Count at		B. Coli. per 100 m.l.
	37°C.	22°C.			37°C.	22°C.	
Jan....	0	3	0		1	3	0
Feb....	3	4	0		1	2	0
Mar....	0	0	0		0	1	0
April ..	4	22	1 Non Fæcal		0	6	0
May...	2	8	0		8	36	5 Non Fæcal
June ..	1	9	0		0	4	0
July...	2	5	0		3	9	3 Non Fæcal
Aug. ..	1	10	0		17	27	6 Non Fæcal
Sept. ..	2	6	0	Crescent	7	23	13 Non Fæcal
				Regent Road	3	7	3 Non Fæcal
Oct....	4	5	0	*Prince's Bridge.......	0	0	0
				Regent Road, 1st	2	5	0
				Regent Road, 2nd	1	2	0
				Chapel St. ...	1	2	0
				Crescent	3	4	0
				*Blackfriars....	3	4	0
Nov. ..	5	9	0	Chapel St. ...	3	5	0
				*Blackfriars....	6	10	0
				Crescent	2	8	0
				Regent Road, 1st	4	7	2 Non Fæcal
				Regent Road, 2nd	3	4	1 Non Fæcal
				*Prince's Bridge.......	2	16	13 Non Fæcal
Dec....	0	6	0	Regent Road, 1st	3	6	— 0
				Regent Road, 2nd	3	5	0
				Crescent	3	7	0
				Chapel St. ...	7	44	1 Non Fæcal
				*Blackfriars....	8	30	0

* Indicates sample taken from Standpipe at Entrance of the Water Supply to the Area.

Examinations made in the Pathological Laboratory, Regent Road, Salford, 5, 1947.

	No. of Specimens.	Unit Value.	Total.
Hæmoglobin Estimations	1,750	1	1,750
Investigations for Rh. Factor	1,034	3	3,102
Determinations of Blood Group	128	2	256
Widal Reactions	49	5	245
Wassermann Tests	7,886	2	15,772
Kahn Tests	11,437	2	22,874
Gonorrhœa Complement Fixation Tests	1,091	2	2,182
Smears for Gonococci	46	2	92
Gonococcal Cultures	481	3	1,443
Milk Counts	3	4	12
,, Methylene Blue Tests	316	2	632
,, Bacillus Coli Tests	317	3	951
,, Bottles for Sterility	6	3	18
Examination of Swabs for C. Diphtheria	1,078	5	5,390
,, ,, ,, ,, Hæmolytic Streptococci	24	5	120
,, ,, ,, ,, Organisms	2	5	10
,, ,, ,, ,, Penicillin Sensitivity	2	3	6
,, ,, Sputa for M. Tuberculosis	933	2	1,866
,, ,, ,, ,, Organisms	1	2	2
,, ,, Urine	18	3	54
,, ,, Fæces	67	7	469
,, ,, Rectal Swabs	7	7	49
,, ,, Drinking Water	55	10	550
,, ,, Swimming Bath Water	180	10	1,800
,, ,, Hair for Ringworm Parasite	2	2	4
,, ,, Beast's Ear for Anthrax Bacilli	7	3	21
,, ,, Various Foods for Food Poisoning Organisms	12	5	60
,, ,, Pleural Fluids	2	5	10
,, ,, Smear for Malaria Parasite	1	3	3
,, ,, Pus	2	3	6
,, ,, Babies' Feeding Bottle for Sterility	3	3	9
,, ,, Milk (Human)	1	5	5
Rideal Walker Tests	6	20	120
Asheim-Zondeck Tests	11	10	110
Virulence Tests	16	10	160
Typing of Coliform Organisms	45	4	180
TOTALS	27,019	...	60,333

EXAMINATIONS MADE FOR OTHER AUTHORITIES DURING THE YEAR 1947.

Examinations.	Prestwich.	Eccles.	Whitefield.	Stretford.	Total No. of Specimens.	Units.	Total Units.
Examination of Swabs for C. Diphtheria	75	...	4	...	79	5	395
,, ,, Sputa for M. Tuberculosis	7	...	...	...	7	2	14
Virulence Tests	4	...	...	...	4	10	40
Milk for Methylene Blue Tests	26	12	...	...	38	2	76
,, ,, Count	28	6	...	...	34	4	136
,, ,, Bacillus Coli. Test	30	6	...	...	36	3	108
,, ,, Guinea Pig Inoculation	22	...	...	...	22	10	220
Examination of Swimming Bath Water	...	2	...	...	2	10	20
,, ,, Drinking Water	6	1	...	1	8	10	80
,, ,, Ice Lollies	5	...	...	...	5	8	40
,, ,, Various Foods for Food Poisoning Organisms	2	...	...	...	2	5	10
,, ,, Fæces	5	...	...	...	5	5	25
,, ,, Urine	5	...	...	...	5	3	15
	215	27	4	1	247	...	1,179

CITY ANALYST'S REPORT.

FOOD AND DRUGS ACT 1938.

The following table (Table 1) contains particulars of 1,651 samples examined for the City of Salford under the Food and Drugs Act 1938, during the year 1947.

TABLE 1.

SAMPLES.	Number Examined.	Number Adulterated or otherwise giving rise to irregularity.		Per cent. Adulteration.
		Preservatives Only.	Other Ways.	
Milk	1,190	—	31	2·6
Butter	44	—	—	—
Margarine	44	—	—	—
Lard	2	—	—	—
Cooking Fat	42	—	—	—
Cheese	44	—	—	—
Tea	27	—	—	—
Sugar	44	—	—	—
" Real Butter " Toffee	1	—	1	100
"Cream" Filler (for cakes)	1	—	—	—
Tin-Greasing Fat	1	—	—	—
Confectioner's Fat	1	—	—	—
Fat Extender	1	—	—	—
Trifle	1	—	—	—
Fruit Cake	1	—	—	—
Condensed Milk	5	—	—	—
Mineralised Baby Food	2	—	2	100
Food Beverage Powder	5	—	—	—
Tinned Beans	3	—	—	—
Tinned Peas	2	—	—	—
Tinned Soup	5	—	—	—
Tinned Fish	10	—	—	—
Tinned Turnips	1	—	—	—
Fish Paste	4	—	—	—
Flour	2	—	—	—
Self-Raising Flour	8	—	—	—
Soya Flour	2	—	—	—
Cake Flour	1	—	—	—
Cake Mixture	1	—	—	—
Pudding Mixture	1	—	—	—
Sponge Mixture	1	—	—	—
Scone Mixture	1	—	—	—
Starch Reduced Bread	1	—	—	—
Cocoa	6	—	—	—
Coffee	4	—	—	—
" Choc-Malt Spread "	2	—	—	—
Barley	4	—	—	—
Malted Milk Tablets	1	—	—	—
Malt Extract Tablets	1	—	—	—
Powdered Soup	3	—	—	—

TABLE 1—*Continued.*

SAMPLES.	Number Examined.	Number Adulterated or otherwise giving rise to irregularity.		Per cent. Adulteration.
		Preservatives Only.	Other Ways.	
Meat Cubes	2	—	—	—
Semolina	4	—	—	—
" Faranoca "	1	—	—	—
" Soyghetti "	1	—	—	—
Custard Powder	2	—	—	—
Ground Ginger	1	—	—	—
Mixed Spice	1	—	—	—
Curry Powder	2	—	—	—
Dried Mashed Potatoes	1	—	—	—
Ground Nuts	1	—	1	100
Ground Almond Substitute	2	—	2	100
Sweetening Compound (for diabetics)	1	—	—	—
Lemon Curd	2	—	—	—
Marmalade	2	—	—	—
Beef Sausage	5	—	2	40
Mustard	4	—	1	25
Gravy Browning	5	—	—	—
Sage and Onion Stuffing	3	—	—	—
Salad Dressing Powder	1	—	1	100
Salad Dressing	1	—	—	—
Salad Oil	1	—	—	—
Baking Powder	3	—	—	—
Pepper	2	—	—	—
Malt Vinegar	3	—	—	—
Non-brewed Vinegar	3	—	—	—
Blackcurrant Syrup	1	—	—	—
Blackcurrant Purée	1	—	—	—
Lemonade	1	—	1	100
Wine Cocktail	2	—	—	—
" Non-alcoholic Cocktail "	2	—	2	100
Whisky	2	—	—	—
Gin	1	—	—	—
Malt Extract and Cod Liver Oil	2	—	—	—
Cod Liver Oil	1	—	—	—
Gelatine	2	—	1	50
Fruit Juice	2	—	—	—
Saline Medicine	3	—	2	66·6
Saccharine Tablets	2	—	—	—
Bicarbonate of Soda	4	—	—	—
Seidlitz Powders	6	—	—	—
Epsom Salts	5	—	—	—
Glauber Salts	2	—	—	—
Castor Oil	3	—	—	—
Cough Mixture	4	—	—	—
Chest and Lung Mixture	1	—	—	—

TABLE 1—*Continued.*

Samples.	Number Examined.	Number Adulterated or otherwise giving rise to irregularity.		Per cent. Adulteration.
		Preservatives Only.	Other Ways.	
Compound Tincture of Rhubarb	1	—	—	—
Liquid Extract of Rhubarb	1	—	—	—
Liquid Extract of Cascara	2	—	—	—
Liquid Extract of Senna	1	—	—	—
Glycerine and Borax	2	—	—	—
Glycerine, Borax and Honey	1	—	—	—
Rose-Hip Syrup	2	—	—	—
Laxative Chocolate	3	—	1	33·3
Sulphur Tablets	1	—	—	—
Hydrogen Peroxide	2	—	—	—
Compound Syrup of Figs	1	—	—	—
Cream of Tartar	1	—	—	—
Camphorated Oil	4	—	—	—
Zinc Ointment	5	—	—	—
Boric Acid Ointment	3	—	2	66·6
	1,651	—	50	3·0

TABLE 2.

PERCENTAGE OF ADULTERATION—SALFORD.

Year.	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947
centage of dulteration....	7·2	7·1	6·9	7·2	6·1	3·7	3·1	3·9	3·3	3·0
l Samples ...	1,284	1,353	1,344	1,296	1,512	1,555	1,513	1,628	1,742	1,651
nal Samples..	396	377	406	427	464	499	427	385	389	315
rmal Samples	888	976	714	753	884	833	891	1,077	1,205	1,178
ate Samples..	—	—	224	116	164	223	195	166	148	158
of Samples 100,000 of population...	636	679	685	748	946	1,014	989	1,045	1,022	942

Calculated on civil population only from 1941 onwards.

TABLE 3.

Adulteration of Milk—Salford.

Year.	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947
No. of Samples...	1,006	923	930	923	919	883	995	1,107	1,074	1,147	1,275	1,190
Percentage of Adulteration ...	3·0	5·9	6·2	6·5	5·4	5·7	6·2	3·1	1·9	3·5	3·6	2·6

TABLE 4.

Average Composition of all Milk.

Month.	Number of Samples.	Total Solids per cent.		Fat per cent.		Solids-not-fat per cent.	
January	133	12·20	12·27	3·51	3·54	8·69	8·73
February	69		12·17		3·50		8·67
March............	110		12·15		3·50		8·65
April	110	12·04	12·06	3·38	3·47	8·66	8·59
May	85		12·04		3·38		8·66
June	97		12·02		3·29		8·73
July	97	12·25	12·15	3·51	3·39	8·74	8·76
August	77		12·25		3·56		8·69
September	95		12·36		3·60		8·76
October..........	145	12·42	12·54	3·65	3·71	8·77	8·83
November	94		12·38		3·64		8·74
December	78		12·26		3·54		8·72
	1,190		12·23		3·52		8·71

TABLE 5.

Average Composition of Farmers' Milk.

Month.	Number of Samples.	Total Solids per cent.		Fat per cent.		Solids-not-fat per cent.	
January	48	12·19	12·33	3·49	3·55	8·70	3·78
February	12		11·92		3·26		8·66
March............	37		12·10		3·49		8·61
April	44	12·11	12·21	3·42	3·59	8·69	8·62
May	24		12·12		3·33		8·79
June	36		11·97		3·27		8·70
July	28	12·29	12·16	3·57	3·42	8·72	8·74
August	48		12·33		3·63		8·70
September	24		12·34		3·63		8·71
October..........	55	12·44	12·58	3·65	3·70	8·79	8·88
November	45		12·38		3·65		8·73
December	21		12·19		3·52		8·67
	422		12·26		3·54		8·72

TABLE 6.

Average Composition of Milk other than Farmers' Milk.

Month.	Number of Samples.	Total Solids per cent.		Fat per cent.		Solids-not-fat per cent.	
January	85	12·21	12·23	3·53	3·53	8·68	8·70
February	57		12·22		3·55		8·67
March............	73		12·17		3·50		8·67
April	66	12·01	11·97	3·37	3·39	8·64	8·58
May	61		12·01		3·40		8·61
June	61		12·06		3·31		8·75
July	69	12·23	12·14	3·48	3·38	8·75	8·76
August	29		12·12		3·45		8·67
September	71		12·36		3·59		8·77
October..........	90	12·41	12·51	3·65	3·71	8·76	8·80
November	49		12·38		3·64		8·74
December	57		12·29		3·56		8·73
	768		12·22		3·51		8·71

TABLE 7.

AVERAGE COMPOSITION OF ALL MILK—SALFORD.

Year.	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947
	%	%	%	%	%	%	%	%	%	%	%	%
Fat	3·66	3·67	3·64	3·61	3·66	3·69	3·66	3·63	3·64	3·59	3·55	3·52
Solids-not-fat	8·89	8·85	8·83	8·79	8·70	8·65	8·63	8·69	8·73	8·66	8·70	8·71
Total Solids	12·55	12·52	12·47	12·40	12·36	12·34	12·29	12·32	12·37	12·25	12·25	12·23

In Table 8 will be found details of 31 samples of milk and in Table 11 of 19 samples other than milk, all reported as "adulterated or otherwise giving rise to irregularity." The overall percentage adulteration (as shown in Table 1) is 3·0, a figure which is in close agreement with that for the last few years. A high proportion of the samples reported as adulterated consisted of milks showing deficiencies in fat content of less than 10 per cent., or in solids-not-fat of less than 3 per cent. of the respective minimum limits. Most of the cases were dealt with by letters of caution.

In the case, however, of two samples in Table 11 (non-milk samples), legal proceedings were instituted, resulting in the infliction of penalties totalling £48 18s. 6d. (including costs).

Milk Adulteration.

No.	Nature of Adulteration, etc.	Action Taken.	Remarks.
B2873	Deficient 6·6% milk fat	Farmer written	See special observations.
B2878	Deficient 5·0% milk fat		
B2916	Deficient 3·3% milk fat	Supply has since ceased	Farm milk.
A1592	3·2% extraneous water. F.Pt. (Hortvet) —0·516°C. Acidity 18°R.	Dairy written	Sterilised milk. See special observations.
B2968	Deficient 3·3% milk fat	Farmer written	Part of consignment (satisfactory average).
A1628	2·0% extraneous water. F.Pt. (Hortvet) —0·527°C. Acidity 18°R.	Supply kept under observation	Later samples genuine. See special observations.
A1648	Deficient 3·3% milk fat	Supply kept under observation	Further samples genuine.
B3128	Deficient 3·3% milk fat	Farmer written	See special observations.
B3147	Deficient 6·6% milk fat	Further samples taken	See special observations.
B3151	2·3% extraneous water. F.Pt. (Hortvet) —0·516°C. Acidity 18°R.	Formal samples taken	Formal samples genuine.
B3155	Deficient 6·6% milk fat	Repeat sample requested	This supply has been discontinued.
B3247	Deficient 3·3% milk fat	Farmer written	Representing part of consignment (satisfactory average).
B3359	Deficient 13·3% milk fat	Formal samples taken	See A1749, A1750 and A1754.
A1749	Deficient 6·6% milk fat	Farmer written	See B3448.
A1750	Deficient 13·3% milk fat		
A1754	Deficient 11·3% milk fat		
B3448	Deficient 10·0% milk fat	Farmer again written	See special observations.

TABLE 8—*Continued.*

No.	Nature of Adulteration, etc.	Action Taken.	Remarks.
B3363	Deficient 15·0% milk fat	Formal samples taken	See A1742, A1745 and A1746.
A1742 A1745 A1746	Deficient 10·0% milk fat Deficient 8·3% milk fat Deficient 8·3% milk fat	Farmer written	See special observations.
B3407	Deficient 3·3% milk fat	Farmer written	Representing part of consignment.
B3410	Deficient 3·3% milk fat	Formal samples taken	Formal samples genuine.
B3452	Deficient 8·3% milk fat	Farmer written	Representing part of consignment.
B3493 B3494	Deficient 3·3% milk fat Deficient 25·0% milk fat	Formal samples taken	See A1784.
A1784	Deficient 10·0% milk fat	Farmer written	See special observations.
B3696	Deficient 8·3% milk fat	Formal samples taken	Formal samples genuine.
A1865	0·5% extraneous water. F.Pt. (Hortvet) —0·521°C. Acidity 18°R.	Further samples taken	See A1876.
A1876	0·7% extraneous water. F.Pt. (Hortvet) —0·520°C. Acidity 18°R.	Dairy company written	Sterilised milk.
B166	Deficient 3·3% milk fat	Farmer written	Representing part of consignment.

MILK.

One thousand one hundred and ninety samples of milk were examined during the year, 422 being samples of farmers' milk taken in course of delivery to wholesalers and retailers in Salford. As will be noted from Tables 4, 5 and 6, the average butter fat content of all milk for the whole year was 3·52 per cent., that of farmers' milk being 3·54 per cent., and that of milk taken from all other sources 3·51 per cent. The farmers' milk therefore showed, if anything, a very slightly higher figure for butter fat than retail milk.

The number of milk samples which were poor in solids-not-fat when compared with the presumptive limit of the Sale of Milk Regulations 1939, but which were nevertheless adjudged genuine on the Hortvet freezing point test, totalled 25. Of these, 11 occurred in the March quarter, six in the June quarter, two in the September quarter and three in the December quarter. The numbers of such milks in the five preceding years were as follows :—1942, 72 samples ; 1943, 36 samples ; 1944, 17 samples ; 1945, 39 samples ; 1946, 41 samples.

TABLE 9.

Average Butterfat Content of Milk—Salford.

Year.	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947
All Milks	3·64	3·61	3·66	3·69	3·66	3·63	3·64	3·59	3·55	3·52
Farmers' Milks	3·69	3·62	3·70	3·71	3·71	3·62	3·74	3·65	3·60	3·54
Other than Farmers' Milks	3·59	3·60	3·64	3·67	3·64	3·64	3·62	3·57	3·52	3·51

Thirty-one samples of milk were reported upon as " adulterated or otherwise giving rise to irregularity." during the year. Before any milk was reported upon as adulterated due to deficiency in solids-not-fat it was submitted to the Hortvet freezing point test, any samples passing this test were reported as naturally deficient. The above figure represents a percentage adulteration of 2·6. The figure for milk adulteration throughout England and Wales during the last 12 years for which figures are available varied from 6·4 per cent. to 3·2 per cent., so that in the light of this the Salford figure cannot be considered as unsatisfactory.

In the following table will be found particulars of the various types of adulteration and the number of samples under each heading :—

Milks deficient in fat only	26 or 2·2%
Milks containing added water only	5 or 0·4%
Milks deficient in fat and containing added water	Nil
	31 or 2·6%
Milks containing more than 3% added water	1 or 0·1%
Milks 10% or more deficient in fat	8 or 0·7%

No samples contained colouring matter or preservative.

TABLE 10.

The following samples of milk showed figures for solids-not-fat below the presumptive limit of 8·5 per cent. solids-not-fat of the Sale of Milk Regulations 1939, but were adjudged genuine (apart from any deficiency in fat) on the Hortvet freezing point test :—

Serial Number	Total Solids per cent.	Fat per cent.	Solids-not-fat per cent.	Freezing Point (Hortvet)	Acidity ° Richmond
B2871	11·49	3·25	8·24	—0·546°C.	18
B2875	11·41	3·25	8·16	—0·538°C.	16
B2968	11·23	2·90	8·33	—0·542°C.	16
A1632	11·72	3·30	8·42	—0·537°C.	18
A1634	11·73	3·25	8·48	—0·533°C.	18
A1657	11·30	3·00	8·30	—0·535°C.	18
B3128	11·31	2·90	8·41	—0·531°C.	20
A1678	11·43	3·05	8·38	—0·531°C.	19
B3145	11·53	3·10	8·43	—0·538°C.	18
B3147	10·99	2·80	8·19	—0·538°C.	19
B3153	12·09	3·80	8·29	—0·535°C.	19
B3154	11·72	3·35	8·37	—0·536°C.	17
B3155	10·97	2·80	8·17	—0·539°C.	17
B3156	11·47	3·35	8·12	—0·538°C.	19
B3178	12·00	3·70	8·30	—0·546°C.	19
A1692	11·59	3·15	8·44	—0·543°C.	19
B3200	11·60	3·15	8·45	—0·538°C.	15
A1699	12·00	3·60	8·40	—0·535°C.	17
B3231	11·35	3·10	8·25	—0·541°C.	19
B3235	11·90	3·60	8·30	—0·544°C.	19
B3611	11·65	3·40	8·25	—0·533°C.	17
A1809	11·65	3·20	8·45	—0·537°C.	18
B3888	11·68	3·35	8·33	—0·542°C.	18
A1892	11·69	3·35	8·34	—0·543°C.	17
B166	11·26	2·90	8·36	—0·531°C.	19

The next paragraphs give brief accounts of the more interesting adulterated samples. They refer to those samples indicated in Table 8 by the words " see special observations " in the Remarks column.

Samples B2873 and B2878 Milk.

These two informal samples represented two cans out of ten consigned together to a City dairy. On analysis they were found to contain only 2·90 per cent. and 2·85 per cent. of fat respectively, and when compared with the 3·0 per cent. presumptive minimum limit for fat fixed by the Sale of Milk Regulations 1939, the deficiencies in fat were respectively 3·3 per cent. and 5·0 per cent. of the minimum limit. Two other samples from this consignment, B2871 and B2875, appear in Table 10 as being naturally poor in non-fatty solids. Other samples from this consignment were of very good quality. It was deemed appropriate to write a letter to the farmer advising him to seek advice from his local agricultural college with a view to the production of more uniformly satisfactory milk.

Sample A1592, Milk.

This formal sample of sterilised milk represented a one-pint bottle (crown-corked) of sterilised milk sold in a shop. On analysis it was found to contain only 8·22 per cent. of non-fatty solids ; corresponding, on comparison with the 8·5 per cent. presumptive minimum limit for non-fatty solids of the Sale of Milk Regulations, to the presence of 3·2 per cent. of extraneous water. The presence of extraneous water was confirmed by the Freezing Point test. A letter was sent to the sterilising dairy supplying the shop, urging that every precaution should be taken to prevent access of water to the milk.

Sample A1628, Milk.

This formal sample represented a one-pint bottle of milk purchased in a shop. On analysis it was found to contain only 8·33 per cent. of non-fatty solids, and on comparison with the 8·5 per cent. presumptive minimum limit for non-fatty solids fixed by the Sale of Milk Regulations, the deficiency was equivalent to the presence of 2·0 per cent. of extraneous water. The freezing point (—0·527°C. Hortvet) was consistent with the presence of extraneous water, but did not in this case give a clear indication of as much as 2·0 per cent. The next day, four samples were taken in course of delivery from the dairy supplying the shop. These samples though found to be genuine were of poor quality, and two of them (A1632 and A1634) appear in Table 10. Later samples from this dairy have been satisfactory.

Sample B3128, Milk.

This informal sample represented a can of milk consigned with other cans by a farmer to a City dairy. It was found on analysis to have the composition shown in Table 10 and the freezing point indicated that the sample was naturally poor in solids-not-fat. The percentage of fat was also below the presumptive minimum limit fixed by the Sale of Milk Regulations. To investigate this supply further, on a later day a formal sample was taken from each of the same farmer's cans (five in all) on delivery at the dairy. On this occasion each of the samples was genuine ; but one (A1678) is included in Table 10 as being naturally poor in solids-not-fat. The farmer was recommended by letter to seek advice from his local agricultural college.

Sample B3147, Milk.

This informal sample of farmer's milk appears in Table 10 as being naturally poor in non-fatty solids. There was also a deficiency in fat of 6 per cent. of the minimum presumptive limit (3 per cent.) fixed by the Sale of Milk Regulations. Further informal samples of milk have been examined, representing all this farmer's consignment (six cans) in course of delivery at the dairy, and the fat contents have been found to be 2·50 per cent., 3·60 per cent., 2·95 per cent., 2·65 per cent., 3·45 per cent. and 2·90 per cent. respectively. The farmer has been urged to seek advice with the object of producing more uniformly satisfactory milk.

Sample B3359, Milk.

This informal sample represented one out of several cans consigned together by a farmer to a City dairy. On analysis it was found to contain only 2·60 per cent. of fat, and on comparison with the 3·0 per cent. presumptive minimum limit for fat fixed by the Sale of Milk Regulations 1939, the sample was deficient in fat to the extent of 13·3 per cent. of the said minimum limit. (See next paragraph.)

Samples A1749, A1750 and A1754, Milk.

Following sample B3359 above, a formal sample was taken from each can (eight in all) consigned by the same farmer to a City dairy, and these samples were numbered consecutively A1748 to A1755. On analysis the percentages of fat in these samples were found to be 3·80, 2·80, 2·60, 3·75, 4·40, 4·20, 2·65 and 4·15 respectively. When compared with the 3 per cent. minimum presumptive limit for fat fixed by the Sale of Milk Regulations, five of these samples were found to be genuine and, indeed, comparatively rich in fat, while the three others were deficient in fat to the extent of 6·6 per cent., 13·3 per cent. and 11·6 per cent. of the said minimum respectively. The farmer was urged by letter to take steps to ensure that each can of his consignment would satisfy the requirements of the Regulations. See also the next paragraph.

Sample B3448, Milk.

After the lapse of about three weeks, informal samples were taken from each can of the same farmer's consignment in course of delivery at the dairy, and were numbered consecutively B3443 to B3450. Of these eight samples, seven were genuine, but B3448 was found on analysis to contain only 2·7 per cent. of fat, corresponding to a fat deficiency of 10 per cent. when compared with the 3 per cent. minimum presumptive limit. The farmer was again urged by letter to ensure that each of his cans of milk satisfied the Regulations.

Sample B3363, Milk.

This informal sample of milk represented one of several cans of milk consigned together by a farmer to a City dairy. On analysis it was found to contain only 2·55 per cent. fat, and was therefore deficient in fat to the extent of 15 per cent. when compared with the 3·0 per cent. minimum presumptive limit for fat fixed by the Regulations. To investigate this supply further, formal samples were taken next day from each can of the farmer's consignment in course of delivery at the dairy. (See next paragraph.)

Samples A1742, A1745 and A1746, Milk.

Following B3363 above, formal samples were taken from each of six cans and the samples were numbered A1742 to A1747 respectively. On analysis, the respective percentages of fat in the six samples were : 2·70, 3·20, 4·55, 2·75, 2·75 and 4·20. In the case of A1742, A1745 and A1746, the fat deficiencies were 10·0 per cent., 8·3 per cent. and 8·3 per cent. respectively (on comparison with the 3·0 per cent. fat limit). Taken as a whole, the consignment of six cans would be considered as satisfactory, but the wide variation in fat content among the cans could give rise to trouble. A letter was written to the farmer urging him to take steps to ensure that each can of milk consigned by him would in future satisfy the Sale of Milk Regulations.

Samples B3493 and B3494, Milk.

These informal samples represented two out of four cans of milk consigned together by a farmer to a City dairy. On analysis they were found to contain 2·90 per cent. and 2·25 per cent. of fat respectively, and were therefore deficient in fat, when compared with the 3·0 per cent. minimum presumptive limit for fat fixed by the Sale of Milk Regulations 1939, to the extent of 3·3 per cent. and 25·0 per cent. of the said minimum limit. To investigate this supply further, formal samples were taken at a later date from each can of the farmer's consignment in course of delivery at the dairy. (See next paragraph.)

Sample A1784, Milk.

Following samples B3493 and B3494 above, formal samples were taken from each of four cans and the samples were numbered A1783 to A1786 respectively. On analysis, one sample, A1784, was found to contain only 2·70 per cent. of fat and was therefore deficient in fat to the extent of 10·0 per cent. when compared with the 3·0 per cent. presumptive limit for fat fixed by the Regulations. The other three samples were found to be genuine. The farmer was urged by letter to seek advice from his local agricultural college and to take active steps to improve the milk of his herd.

TABLE 11.

SAMPLES (OTHER THAN MILK) ADULTERATED OR OTHERWISE GIVING RISE TO IRREGULARITY.

No.	Description.	Nature of Adulteration or Irregularity.	Remarks.
B2827	Ground Nuts	Not less than 20% wheat rusk present.	Formal sample unobtainable. See special observations.
A1619	" Real Butter " Toffee	Unsatisfactory label	See special observations.
B3280	Gelatine	Copper, 50 parts per million	Vendors written. See special observations.
A1756	Lemonade	Sulphuretted hydrogen, 3 parts per million.	Manufacturers written. See special observations.
B3415	" Health Salts " (Saline Medicine)	Not in accordance with declaration on label.	See A1791.
A1791	Saline Medicine	Not in accordance with composition declared on label.	Prosecution and conviction. Manufacturers fined £10 and £5 5s. costs (£15 5s. in all). See special observations.
B3429	Mustard	Decomposing and unfit for human consumption.	Stock surrendered. See special observations.
B3521	Salad Dressing Powder	Failure to comply with Labelling of Food Orders, 1944 and 1946.	See special observations.
B3647	Ground Almond Substitute	Sold " loose "	See special observations.
B3736	Laxative Chocolate	Deficient 21% of phenolphthalein declared.	See special observations.

TABLE 11—*Continued.*

SAMPLES (OTHER THAN MILK) ADULTERATED OR OTHERWISE GIVING RISE TO IRREGULARITY.

No.	Description.	Nature of Adulteration or Irregularity.	Remarks.
B3940	Mineralised Baby Food	Unsatisfactory label	Formal sample taken. See A1869.
A1869	Mineralised Baby Food	Not in accordance with statement on label.	Prosecution and conviction. Distributors fined £30 and 3½ guineas costs (£33 13s. 6d. in all). See special observations.
B3964	Boric Ointment B.P.	Contained 59% excess boric acid.	In each case the manufacturers were written. See special observations.
B3965	Boracic Ointment B.P.	Contained 46% excess boric acid	
B97	Non-alcoholic Cocktail	Not in accordance with Soft Drinks Order.	Reported to Ministry of Food Enforcement Branch. See special observations.
B98	Non-alcoholic Cocktail	Not in accordance with Soft Drinks Order.	
B111	Sausage	10% deficient in meat	Makers interviewed. See special observations.
B117	Sausage	10% deficient in meat	
B124	Ground Almond Substitute	Sold loose (Infringement of Food Substitutes Order).	Reported to Ministry of Food Enforcement Branch. See special observations.

SAMPLES OTHER THAN MILK.

Special observations on samples reported as not genuine.

Sample B2827, Ground Nuts.

This informal sample sold loose by retail, was found on analysis to be adulterated to the extent of at least 20 per cent. with wheat rusk. On enquiry, it was found to be part of a small stock taken over with the premises a few months before. No record of the source was available and no further sample obtainable.

Sample A1619, " Real Butter " Toffee.

On analysis, this formal sample was found to contain 12·0 per cent. of fat, and the fat itself contained not more than 55 per cent. of butter fat. The sample was sold by retail from a large glass " sweet bottle " bearing a conspicuous label with the words " ———'s Real Butter Toffee. Made with Best Butter." In an interview with the manufacturers it was put to them that the ordinary purchaser would take the label to mean that the toffee was made from no other fat than butter, and that while the toffee was an excellent and wholesome sweetmeat, the label was misleading. The manufacturers have undertaken in writing to amend the label by mentioning the presence of other fat.

Sample B3280, Gelatine.

This informal sample, sold loose by retail, was found on analysis to contain 50 parts per million of copper and to have a glue-like odour in warm solution. The recently-issued Edible Gelatine Order 1947 (in force from 23rd February), defines edible gelatine by specification, and among the requirements are a limit of 30 parts per million of copper and absence of offensive odour in warm solution. The sample was therefore not edible gelatine as defined by the Order and the excess of copper amounted to 66 per cent. over the maximum permitted. The multiple grocers concerned have been written drawing their attention to the Order and requesting them to sell in future only gelatine complying with the Order.

Sample A1756, Lemonade.

This formal sample was taken in consequence of a complaint of unpleasant odour in a mineral water. On analysis the sample was found to be of normal composition, except that it had been contaminated with sulphuretted hydrogen to the extent of three parts per million. The makers were interviewed and also urged by letter to prevent access of this foreign ingredient. It was ascertained by experiment that some of the composition screw-stoppers in use were capable of yielding sulphuretted hydrogen when exposed to weak citric acid solution.

Sample B3429, Mustard.

This informal sample was the subject of a complaint by a purchaser. It consisted of a small " tin " of mustard. The contents had become dark in colour and smelled offensively. Examination showed that the article was, in fact, mustard in a state of decomposition, and that it was unfit for human consumption. The retailer surrendered all remaining stocks corresponding to the sample.

Sample B3521, Salad Dressing Powder.

This informal sample of a pre-packed article bore a label bearing the words, " Ingredients. Salt, Pepper, Carob Gum, Flavour, Colour." On examination, the opinion was formed that the principal ingredient by weight was carob gum. The manufacturers have accordingly been reminded by letter of the Labelling of Food Orders, 1944 and 1946, which require that the principal ingredient (by weight) shall be stated first on the label. Further, the product was found on analysis to contain only 0·47 per cent. of oil, and a salad dressing made according to the directions on the label would differ to such an extent from a salad dressing complying with the Food Standards (Salad Cream and Mayonnaise) Order 1945, especially in oil content, that the sample would more correctly be described as a salad dressing substitute powder. The Order requires salad dressing to contain 25 per cent. of oil, while a dressing made from the sample would contain only about 1 per cent. of oil or fat, mainly derived from the milk added according to the directions. This aspect of the matter has been referred to the Ministry of Food for appropriate action.

Sample A1791, Saline Medicine.

This formal sample was taken in consequence of the informal sample reported as No. B3415, " Health Salts," and which was found to be " not in accordance with declaration on label." The declared composition, the results of analysis of sample A1791 and the percentage deficiencies of various ingredients are tabulated below :—

	Declared on Label.		Found by Analysis.	Deficiency as % of amount declared.
	Grains.	Equivalent to per cent.	per cent.	
Potassium Iodide	$\frac{3}{4}$	1·25	0·42	66
Potassium Citrate	$2\frac{1}{2}$	4·17	1·47	64
Hexamine	$2\frac{1}{2}$	4·17	1·85	55
Sodium Chloride.............	$1\frac{1}{2}$	2·50	0·41	83
Potassium Bicarbonate ...	$3\frac{1}{2}$	5·83	1·15	80
Sodium Bicarbonate	5	8·33	5·54	33
Sodium Sulphate	to 60	73·75	87·6	(no deficiency)

In my opinion, the tolerance for errors in manufacture of a product of this nature should not exceed 10 per cent.

The manufacturers of this product were summoned to appear before the City Magistrates on 26th September for contraventions of the Food and Drugs Act 1938 ; (1) for selling a drug not of the nature, substance or quality demanded, Section 3 ; and (2) for giving with a drug a label describing the drug incorrectly, Section 6. Counsel for the defence, Mr. E. Steele, pleaded " not guilty." He did not dispute the analysis but called evidence with the intention of showing that the deficiencies were accidental rather than fraudulent. Defendants were fined £5 on each count and were ordered to pay £5 5s. 0d. costs ; £15 5s. 0d. in all.

Sample B3647, Ground Almond Substitute.

This informal sample represented a product sold " loose " by retail. In composition it was suitable for use as a substitute but its sale by retail " loose " was an infringement of the Food Substitutes (Control) Order 1941. The stock has since been withdrawn.

Sample B3736, Laxative Chocolate.

This informal sample of pre-packed medicinal sweetmeat bore a label stating the proportion of phenolphthalein to be 10 per cent. On analysis only 7·9 per cent. of phenolphthalein was found to be present, corresponding to a deficiency of 21 per cent. of the declared amount. The deficiency was brought to the notice of the packers by letter. In an interview, their representative undertook to replace stocks in the shop, to trace other stocks as far as possible, and to take steps to ensure future compliance with the declaration.

Sample B3940, Mineralised Baby Food.

This informal sample of a pre-packed product bore a label including a statement of ingredients. On analysis it was found to differ in some respects from the declared composition. A formal sample was requested.

Sample A1869, Mineralised Baby Food.

This formal sample was taken following informal sample No. B3940. The label printed on the container included the following :—" Contains : Barley Flour, Par-Dextrinised Oat Flour, Sugar, Rice Starch, Glucose, Milk Sugar, Dibasic Calcium Phosphate, Cocoa and Calcium Gluconate." " Each oz. . . . contains : Calcium 200 mgs.—Phosphorus 200 mgs."

On analysis the sample was found to contain only 150 milligrammes of Calcium and of Phosphorus per ounce, so that the sample was deficient in both these ingredients to the extent of 25 per cent. of the declared amount. The sample was further found to contain 12 per cent. of potato starch, a substance not declared in the list of ingredients on the label. With the consent of the Minister of Food, the distributors of the product were prosecuted, and the case was heard by the Stipendiary Magistrate in March, 1948. Defendants were fined £20 for failing to declare the presence of potato starch, fined £10 for a misleading statement as to the amounts of calcium and phosphorus, and ordered to pay 3½ guineas costs (£33 13s. 6d. in all).

Samples B3964 and B3965, Boric Ointment.

These two informal samples consisted of "tin" boxes (marked B.P.) of ointment prepared by different makers. On analysis they were found to contain respectively 1·59 per cent. and 1·46 per cent. of boric acid. The formula for boric acid ointment, made official by the 7th Addendum to the B.P. 1932, requires 1·0 per cent. of boric acid. The amounts of boric acid found are therefore excessive to the extent of 59 per cent. and 46 per cent. of the required amount respectively. Taking into consideration the fact that until recently the official requirement for boric acid in ointment was 10·0 per cent. and also the fact that the discrepancies in these instances are excesses and not deficiencies, it was deemed sufficient to write letters to the two manufacturers pointing out the importance of complying strictly with Pharmacopœial standards and urging them to take the necessary steps to ensure such compliance.

Samples B97 and B98, "Non-alcoholic Cocktail."

These two informal samples with different labels were found on analysis to contain more than 99 per cent. of water, and were also strongly flavoured and coloured. Unless the manufacturers held a licence from the Ministry of Food for this product (a possibility which seemed on the face of it to be highly improbable) it would be an offence to use the name "non-alcoholic cocktail" because this is not a scheduled name in the Soft Drinks Order. In composition also the samples differed widely from anything for which provision is made in the Order. Only the Ministry of Food has power to enforce this Order, and accordingly information was given to the Enforcement Officer of the Regional Office, who stated that his attention had already been drawn to these products. According to statements in the press, some very few specimens of these products sold in other areas had been suspected of producing ill-effects owing to the presence of undissolved chloroform at the bottom of the bottle. The samples examined in this laboratory were found to contain chloroform, but it was entirely dissolved and did not exceed 0·15 per cent. (by volume) of the whole sample. It is doubtful whether it could be established that such an amount is harmful in view of the fact that chloroform-water is used for making up medicines. It was not possible to obtain subsequent formal samples owing to a complete withdrawal from sale.

Samples B111 and B117, Sausage.

On analysis these two samples were both found to contain only 45 per cent. of meat, a deficiency of 10 per cent. when compared with the 50 per cent. standard for meat fixed by the Meat Products Order 1947, a standard which has also been upheld in the courts for the purposes of Section 3 of the Food and Drugs Act 1938. Taking into consideration that the Order directs that no account shall be taken of any deficiency until the deficiency exceeds 5 per cent., and also the difficulties of mixing and sampling products of this nature, it was deemed advisable to bring the deficiencies to the notice of the makers by personal visits of the Sampling Officer. The makers undertook to bring their products uniformly up to standard.

Sample B124, Ground Almond Substitute.

On analysis this informal sample was found to consist of about equal parts of soya flour and a wheat product (probably powdered rusk) slightly flavoured. In composition it was probably quite suitable for use as an almond substitute, but the Food Substitutes Order 1941, requires that substitutes shall only be retailed when pre-packed, and when the label includes a declaration of the Licence No. given by the Ministry of Food. This sample was on sale loose. The facts relating to the purchase have been reported to the Ministry of Food Enforcement Officer for the Region.

BOROUGH OF ECCLES.

During the year 150 samples were received from the above Borough for examination under the Food and Drugs Act 1938.

Fourteen samples were found to be adulterated or otherwise to give rise to irregularity.

Details of the above samples are given in the following table :—

TABLE 12.

Samples Examined.

Samples.	Number Examined.	Number Adulterated or otherwise giving rise to irregularity.		Per cent. Adulteration.
		Preservatives Only.	Other Ways.	
Milk	90	—	10	11·1
Butter	2	—	—	—
Margarine	2	—	—	—
Cooking Fat	2	—	—	—
Cooking Oil	1	—	1	100
Sugar	2	—	—	—
Self-Raising Flour	2	—	—	—
Soya Flour	2	—	—	—
Baking Powder	3	—	—	—
Tea	2	—	—	—
Coffee	2	—	—	—
Coffee and Chicory	1	—	—	—
" Lemon Powder "	1	—	—	—
Lemonade Powder	1	—	—	—
Arrowroot	1	—	—	—
Fish Paste	2	—	—	—
Gravy Browning	3	—	—	—
Malted Milk	1	—	—	—
Junket Powder	1	—	1	100
Gelatine	1	—	—	—
Malt Vinegar	2	—	—	—
Unfermented Vinegar	1	—	—	—
Mustard	2	—	—	—

TABLE 12—*Continued.*

SAMPLES.	Number Examined.	Number Adulterated or otherwise giving rise to irregularity.		Per cent. Adulteration.
		Preservatives Only.	Other Ways.	
Sweets	1	—	—	—
Whisky	1	—	—	—
Gin	1	—	—	—
Ginger	1	—	—	—
Pepper	1	—	—	—
Borax	1	—	—	—
Potatoes	1	—	—	—
Fried Potatoes	2	—	—	—
" Drywite "	1	—	1	100
Diluted Solution of " Drywite "	1	—	1	100
Castor Oil	2	—	—	—
Epsom Salts	2	—	—	—
Seidlitz Powders, Extra Strong	2	—	—	—
Seidlitz Powder	1	—	—	—
Sulphur Ointment	2	—	—	—
Boric Ointment	1	—	—	—
Boracic Ointment	1	—	—	—
Boracic Powder	1	—	—	—
	150	—	14	9·3

TABLE 13.

AVERAGE COMPOSITION OF ALL MILK.

Month.	Number of Samples.	Total Solids per cent.		Fat per cent.		Solids-not-fat per cent.	
January	5	11·98	12·08	3·46	3·53	8·52	8·55
February	15		11·94		3·44		8·50
March	4		11·99		3·45		8·54
April	11	12·17	12·09	3·57	3·52	8·60	8·57
May	2		12·00		3·35		8·65
June	4		12·49		3·84		8·65
July	11	11·60	10·92	3·38	3·19	8·22	7·73
August	4		12·25		3·63		8·62
September	9		12·14		3·49		8·65
October	14	12·19	12·11	3·52	3·44	8·67	8·67
November	6		12·31		3·61		8·70
December	5		12·31		3·66		8·65
	90		11·98		3·48		8·50

TABLE 14.

MILK ADULTERATION.

No.	Nature of Adulteration or Irregularity.	Action Taken.	Remarks.
1016	2·7% extraneous water. F.Pt. (Hortvet) —0·521°C. Acidity 19°R.	Dairy written	Sterilised milk.
1019	Deficient 13·3% milk fat	Farmer and vendor warned	See special observations.
1030	Deficient 6·6% milk fat		
1031	12·1% extraneous water. F.Pt. (Hortvet) —0·457°C. Acidity 14°R.		
1089	34·1% extraneous water. F.Pt. (Hortvet) —0·358°C. Acidity 22°R.	Formal samples requested. See Nos. 1090 and 1091.	Informal sample.
1090	26·8% extraneous water. F.Pt. (Hortvet) —0·371°C. Acidity 13°R.	"Appeal to Cows' sample taken. Prosecution and conviction (£15 including costs).	See special observations.
1091	43·5% extraneous water. F.Pt. (Hortvet) —0·306°C. Acidity 20°R.		
1093	8·0% extraneous water. F.Pt. (Hortvet) —0·520°C. Acidity 26°R.	No separate action	See special observations.
1146	Deficient 16·6% milk fat	Retailer warned	See special observations.
1149	Deficient 3·3% milk fat	Appropriate County Medical Officer written.	Farmer's milk. See special observations.

TABLE 15.

The following samples of milk showed figures for solids-not-fat below the presumptive limit of 8·5 per cent. solids-not-fat of the Sale of Milk Regulations 1939, but were adjudged genuine on the Hortvet freezing point test :—

Serial Number	Total Solids per cent.	Fat per cent.	Solids-not-fat per cent.	Freezing Point (Hortvet)	Acidity ° Richmond
1059	12·34	3·95	8·39	—0·540°C.	15
1060	11·74	3·30	8·44	—0·535°C.	16

In the following table will be found particulars of the various types of milk adulteration and the number of samples under each heading :—

Milks deficient in fat only	4 or 4·4%
Milks containing added water only	6 or 6·7%
Milks deficient in fat and containing added water	Nil
	10 or 11·1%
Milks containing more than 3% added water	5 or 5·6%
Milks 10% or more deficient in fat	2 or 2·2%

No samples contained colouring matter or preservative.

TABLE 16.

" APPEAL TO COW " SAMPLES.

Serial Number.	Total Solids. per cent.	Fat. per cent.	Solids-not-Fat. per cent.	Freezing Point (Hortvet).	Observations.
1092	12·72	3·95	8·77	—0·547°C.	See Samples 1089, 1090 and 1091
1094	13·45	4·75	8·70	—0·544°C.	

The next paragraphs give brief accounts of the more interesting adulterated samples.

Samples 1019, 1030, 1031, Milk.

Sample No. 1019 represented a one-pint bottle of T.T. milk purchased from the dairy company who bottled the milk. The milk was sent to the dairy in ten-gallon milk cans, and because it was T.T. milk the contents of the cans were not bulked but each can was bottled separately. On a subsequent day a sample was taken from each can (seven in all) on delivery from the same farmer at the dairy. Of these samples, five were genuine, one (No. 1030) contained only 2·8 per cent. fat and was thus 6·6 per cent. deficient in fat (on comparison with the minimum presumptive limit of 3·0 per cent. fat fixed by the Sale of Milk Regulations), and one (No. 1031) contained only 7·47 per cent. solids-not-fat corresponding to the presence of 12·1 per cent. extraneous water (on comparison with the minimum presumptive limit of 8·5 per cent. solids-not-fat fixed by the Regulations). The presence of at least that amount of extraneous water was confirmed by the Hortvet freezing point (—0·457°C.). In view of the low fat in sample No. 1030 from their suppliers, no action was taken against the vendors of sample No. 1019, but they were reminded of their responsibility as vendors if milk sold by them should fall below the minimum limit.

The farmer was interviewed, and in regard to sample No. 1030 he was requested to take steps to ensure a more even distribution of fat among the cans sent to the dairy. In regard to sample No. 1031, the farmer gave an explanation involving another producer of T.T. milk outside the area of the Eccles Authority. In view of this explanation it was deemed sufficient to issue a warning to the farmer interviewed, and to communicate with the appropriate County Authority for action in their area.

Samples 1090 and 1091, Milk.

These formal samples represented two cans of milk consigned by a farmer, and were taken in course of delivery to a dairy. On analysis they were found to contain only 6·22 per cent. and 4·80 per cent. of non-fatty solids, corresponding respectively (on comparison with the 8·5 per cent. minimum presumptive limit of the Sale of Milk Regulations, 1939) to the presence of 26·8 per cent. and 43·5 per cent. of extraneous water. The presence of extraneous water was confirmed by the Hortvet freezing point test, the results of which are noted in Table 14. Corresponding appeal-to-cow samples were taken on the earliest practicable occasions. These samples were found to be well above the minimum limit, as shown in Table 16. The farmer was prosecuted, and the case was heard by the Eccles Magistrates on 19th September. A plea of " guilty " was entered and defendant was fined £5 in respect of two samples and ordered to pay £5 costs : £15 in all.

Sample 1093, Milk.

This formal sample was taken for the information of the sampling office during the farm visit for the purpose of taking an " appeal-to-cow " sample It represented a can of milk said to be from a previous day's milking. It wa found on analysis to contain 8·0 per cent. of extraneous water. No separat legal action was taken in respect of this sample.

Sample 1146, Milk.

This formal sample represented unprocessed milk sold by a small retailer. On analysis the sample was found to contain only 2·50 per cent. of fat, corresponding (on comparison with the 3·0 per cent. presumptive minimum limit for fat fixed by the Sale of Milk Regulations 1939) to a deficiency of 16·6 per cent. of the required amount of fat. As subsequent investigation (see next paragraph) partially accounted for the deficiency in fat, it was decided in this instance to send a letter of warning to the retailer.

Sample 1149, Milk.

It was ascertained that the milk, from which the sample noted in the last paragraph was taken, was solely from one farmer. Formal samples were accordingly taken very shortly afterwards, one from each of the farmer's five cans, representing his whole consignment in course of delivery to the retailer. Four of these samples were found on analysis to be genuine, but one of them (No. 1149) contained only 2·90 per cent. of fat, corresponding to a deficiency of 3·3 per cent. of the required fat content. A letter was sent to the appropriate County Medical Officer, informing him of these findings and requesting him to communicate suitably with the farmer.

TABLE 17.

Samples (other than Milk) Adulterated or otherwise giving Rise to Irregularity.

No.	Description.	Nature of Adulteration or Irregularity.	Remarks.
1017	Cooking Oil	Contained 8% Liquid Paraffin	Formal Sample unobtainable. See special observations.
1053	" Drywite "	Contained 8·5% W/V Sulphur Dioxide.	See special observations.
1054	Diluted Solution of " Drywite "	Contained 0·011% W/V Sulphur Dioxide.	
1081	Junket Powders	Unsatisfactory labels	Packers written.

Special observations on samples reported as not genuine.

Sample 1017, Cooking Oil.

This informal sample was obtained on investigating a complaint, and represented the oil actually in use in a fish and chipped-potato frying apparatus. On analysis rather more than 8 per cent. of unsaponifiable matter was found and this consisted almost entirely of liquid paraffin. A corresponding formal sample was unobtainable. The proprietor of the frying establishment was warned that the addition of liquid paraffin to his cooking oil was not considered to be permissible.

Sample 1053, " Drywite."

This informal sample consisted of a bottle of fluid, recommended on the label for use by chipped-potato fryers. The label contained the following statement in the form required by the second schedule of the Public Health (Preservatives, etc., in Food) Regulations, 1925 etc. :— " This preservative contains 7 per cent. of sulphur dioxide." Directions were given for preparing a diluted solution of the preparation, and for using the dilution for soaking raw chipped potatoes. The " chips " were later to be drained and fried as usual, and the claim was made that no preservative would remain in the potatoes after frying. The intention of the process was stated to be to prevent the darkening which sometimes occurs when cut potatoes are exposed to air. On analysis the fluid was found to contain 8·5 per cent. of sulphur dioxide, and to consist of a solution of sulphur dioxide in water. Please see the next paragraph.

Sample 1054, Diluted Solution of " Drywite."

A dilution of " Drywite " was made according to the directions (see above) and a sample was taken. The percentage of sulphur dioxide in this sample was found to be 0·011 per cent. With the friendly co-operation of a potato-fryer, chipped-potatoes were treated in the solution and drained. A sample of the treated and drained potatoes (uncooked) was found on analysis to contain no sulphur dioxide. This may be explained by the exposure to air of the surface of the potatoes and perhaps partly also by the effect of oxidising enzymes present in potato juice. A sample of similarly treated potatoes, taken after frying in the usual way, also contained no sulphur dioxide. The treatment of potatoes (prior to frying) with a solution of sulphur dioxide seems to be contrary to the intention of the Public Health (Preservatives, etc.) Regulations. This matter has been brought to the notice of the Local Authority in whose area the product " Drywite " is manufactured.

Sample 1081, Junket Powders.

This informal sample was contained in two corked glass tubes each bearing a label. One label had the statement " Containing Rennet " and the other had " Containing Rennet, Salt." Analysis showed the chief constituent by weight to be common salt, present to the extent of 50·9 per cent. of the sample. There appeared, therefore, to be a breach of the Labelling of Food Orders, 1944 and 1946, which require a statement of all the ingredients, those present in highest proportions to be stated first. The vendor's attention was drawn to the labelling requirements of the Regulations. As the stock was of comparatively recent date, the packers were written urging them in future to comply with the Regulations.

BOROUGH OF STRETFORD.

During the year, 168 samples were received from the above Borough for examination under the Food and Drugs Act 1938.

Thirteen samples were found to be adulterated. Details of the samples examined are given in the following table :—

TABLE 18.

Samples Examined.

Samples.	Number Examined.	Number Adulterated or otherwise giving rise to irregularity.		Per cent. Adulteration.
		Preservatives Only.	Other Ways.	
Milk	110	—	9	8·2
Butter	2	—	—	—
Margarine	2	—	—	—
Cheese	2	—	—	—
Cooking Fat	2	—	—	—
Sausage	2	—	—	—
Sugar	2	—	—	—
Junket Powder	2	—	1	50
Essence of Rennet	1	—	—	—
Canned Soup	2	—	—	—
Sponge Mixture	4	—	—	—
" Crunchets "	1	—	—	—
Malt Extract with Cod Liver Oil	1	—	—	—
Coffee	1	—	—	—
Coffee Mixture	1	—	—	—
Saccharin Tablets	1	—	—	—
Sweetening Tablets	1	—	—	—
Baking Powder	2	—	—	—
Health Salts	2	—	—	—
Gelatine	1	—	—	—
Jelly Sets	1	—	—	—
Gravy Browning	2	—	—	—
Beverage Powder	1	—	—	—
Custard Powder	2	—	—	—
Malt Vinegar	2	—	—	—
Arrowroot	2	—	—	—
Lemonade Crystals	2	—	—	—
Cookery Colour	1	—	—	—
Iron Tonic	1	—	—	—
Friars Balsam	2	—	—	—
Iodine Smelling Salts	1	—	1	100

TABLE 18.—*Continued,*

SAMPLES.	Number Examined.	Number Adulterated or otherwise giving rise to irregularity.		Per cent. Adulteration.
		Preservatives Only.	Other Ways.	
Glycerine, Lemon and Honey	1	—	—	—
Lemon, Glycerine and Honey	1	—	—	—
All Fours Mixture	1	—	—	—
Cough Mixture	1	—	1	100
Lung Tonic	1	—	—	—
Compound Syrup of Figs	1	—	—	—
Syrup of Figs	1	—	1	100
Castor Oil	2	—	—	—
	168	—	13	7·7

TABLE 19.

AVERAGE COMPOSITION OF ALL MILKS.

Month.	Number of Samples.	Total Solids per cent.		Fat per cent.		Solids-not-fat per cent.	
January	15	12·28	12·45	3·63	3·76	8·65	8·69
February	2		12·20		3·60		8·60
March	8		11·97		3·39		8·58
April	14	12·03	11·91	3·39	3·42	8·64	8·49
May	6		12·07		3·47		8·60
June	24		12·09		3·35		8·74
July	4	12·02	11·92	3·39	3·23	8·63	8·69
August	8		12·08		3·45		8·63
September	4		11·97		3·41		8·56
October	15	12·38	12·38	3·70	3·69	8·68	8·69
November	6		12·34		3·62		8·72
December	4		12·44		3·84		8·60
	110		12·16		3·51		8·65

TABLE 20.

Milk Adulteration.

No.	Nature of Adulteration or Irregularity.	Action Taken.	Remarks.
311	Deficient 8·3% milk fat	Further samples taken	See samples 317, 319, 320, 321, 326, 332 and 333.
317	Deficient 10·0% milk fat	Letters written to farmers concerned.	See special observations.
319	Deficient 3·3% milk fat		
320	Deficient 13·3% milk fat		
321	Deficient 6·6% milk fat		
326	Deficient 3·3% milk fat		
332	Deficient 15·0% milk fat		
333	Deficient 1·6% milk fat		
338	Deficient 3·3% milk fat	County Authority notified	See special observations.

Special observations on samples reported as not genuine.

Sample 311, Milk.

This informal sample represented the output of a heat-treating dairy. Analysis showed it to contain only 2·75 per cent. of fat, and on comparison with the 3 per cent. minimum presumptive limit for fat fixed by the Sale of Milk Regulations, the deficiency in fat corresponded to 8·3 per cent. of the said minimum.

Samples 317, 319, 320, 321, 326, 332 and 333, Milk.

While investigating the circumstances of the fat deficiency found in sample No. 311 (see previous paragraph), it was deemed advisable to take samples representing milk from each farmer supplying the dairy. Accordingly, samples were taken from every can of all the incoming consignments, and the total number of such samples was 21. Among these samples, seven numbered as above contained respectively only 2·70, 2·90, 2·60, 2·80, 2·90, 2·55 and 2·95 per cent. of fat, corresponding to deficiencies in fat of 10·0, 3·3, 13·3, 6·3, 3·3, 15·0 and 1·6 per cent. respectively. Letters were written to the farmers responsible, recommending them to take advice with a view to bringing all milk consigned by them up to the requirements of the Sale of Milk Regulations.

Sample 338, Milk.

This informal sample represented the output of a processing dairy. It was found to contain only 2·9 per cent. of fat, corresponding to a deficiency of 3·3 per cent. of the minimum presumptive limit for fat, namely 3·0 per cent., fixed by the Sale of Milk Regulations 1939. A previous investigation of the quality of the input of this dairy is reported upon above (No. 311, and Nos. 317, 319, 320, 321, 326, 332 and 333). In the circumstances it was deemed appropriate to request the sampling officers of the county authority concerned to take samples at the farms supplying the dairy. Further samples representing the output of the dairy have been examined and found to be genuine.

In the following table will be found particulars of the various types of milk adulteration and the number of samples under each heading :—

Milks deficient in fat only	9 or 8·2%
Milks containing added water only	Nil
Milks deficient in fat and containing added water	Nil
	9 or 8·2%
Milks containing more than 3% added water	Nil
Milks 10% or more deficient in fat	3 or 2·7%

No samples contained colouring matter or preservative.

TABLE 21.

SAMPLES (OTHER THAN MILK) ADULTERATED OR OTHERWISE GIVING RISE TO IRREGULARITY.

No.	Description.	Nature of Adulteration or Irregularity.	Remarks.
262	Cough Mixture..............	Unsatisfactory label........	Packers written.
267	Syrup of Figs	Unsatisfactory label........	Packers written.
285	Junket Powder	Unsatisfactory label........	Packers written.
290	Iodine Smelling Salts	Did not comply with declared composition.	Packers written.

Sample 262, Cough Mixture.

This informal sample bore a label stating the names and proportions of ingredients. One item among the ingredients was itself a compound preparation which is not the subject of a monograph in the B.P. or B.P.C. On being written, the packers stated that the item did not contain any active ingredients, and in future it would be omitted from the label.

Sample 267, Syrup of Figs.

This informal sample bore a label containing a list of ingredients, but not stating the proportions in which they were present. Accompanying literature clearly recommended the article as a medicine. On being written, the packers claimed that the specimen must have been packed prior to a certain date when they discontinued that product, and further that they had endeavoured to trace previous sales and to supply printed adhesive slips to vendors, so as to comply with the Pharmacy and Medicines Act. The delivery date was verified with the help of the vendor. No similar stock remained in the shop. The vendor was reminded of his responsibilities under the Act, and the packers were urged to make every effort to prevent any recurrence.

Sample 285, Junket Powder.

This informal sample of pre-packed junket powder was contained in corked glass tubes themselves contained in a carton. Both tubes and carton bore labels, but none of the labels contained a statement of ingredients as required by the Labelling of Food Orders, 1944 and 1946. The packers were written ; and replied enclosing copies of amended labels which have been in use since 1945, and stating that the sample in question must have been issued by them previous to the coming into force of the 1944 (No. 2) Order. The necessity for correct labelling was also brought to the notice of the vendors.

Sample 290, Iodine Smelling Salts.

This specimen of pre-packed smelling-salts was contained in a small screw-capped glass bottle bearing a label giving a formula. The formula declared the presence of a compounded fluid preparation containing ammonia, industrial alcohol and many minor ingredients, and also mentioned sodium carbonate. This latter was presumably intended to remain undissolved and constituted the " granules " which were actually present in the bottle. The fluid ingredients had, however, escaped from the bottle before purchase and on examination the " impervious " facing of the cork lining of the stopper was found to be defective. The vendor had no further stock. The packers were written and replied that the defect in the stoppers had been discovered some time previously and they had already made an attempt through the wholesalers to withdraw all smelling-salts similar to the present sample from sale.

PHOSPHATASE TESTS.

Since the issue of the Heat-Treated Milk (Prescribed Tests) Order 1944, three full calendar years of regular sampling of heat-treated milks from " all purveyors " have been completed. Although those responsible for carrying out the supervision were working more by persuasion than compulsion, and penalties were vague or non-existent, patience is slowly being rewarded. There has been a progressive reduction in the percentage of samples failing to comply fully with the phosphatase test ; Salford figures are given below :—

Proportion of Failures to Total Samples.

	1945	1946	1947
Total samples (including pasteurised, H.T.S.T. and sterilised milk)	198	285	276
Failures	14·1%	9·8%	4·0%

Phosphatase Tests on Milk Samples submitted by the City of Salford.

In addition to the milk samples examined under the Food and Drugs Act 1938, 276 samples were submitted for examination by the phosphatase test. The results obtained on these samples are tabulated below :—

Type of Milk.	No. of Samples.	Sufficiently heat-treated.	Insufficiently heat-treated.	Grossly under-treated.
Pasteurised	239	228	7	4
Heat-treated	27	27	—	—
Sterilised	10	10	—	—
	276	265	7	4

Phosphatase Tests on Milk Samples submitted by the Borough of Eccles.

In addition to the milk samples examined under the Food and Drugs Act 1938, 40 samples were submitted for examination by the phosphatase test. The results obtained on these samples are tabulated below :—

Type of Milk.	No. of Samples.	Sufficiently heat-treated.	Insufficiently heat-treated.	Grossly under-treated.
Pasteurised	28	28	—	—
Heat-treated	3	3	—	—
Sterilised	9	9	—	—
	40	40	—	—

Phosphatase Tests on Milk Samples submitted by the Borough of Stretford.

In addition to the milk samples examined under the Food and Drugs Act 1938, 63 samples were submitted for examination by the phosphatase test. The results obtained on these samples are tabulated below :—

Type of Milk.	No. of Samples.	Sufficiently heat-treated.	Insufficiently heat-treated.	Grossly under-treated.
Pasteurised	29	28	—	1
Heat-treated	32	32	—	—
Sterilised	2	2	—	—
	63	62	—	1

Phosphatase Tests on Milk Samples submitted by the Borough of Prestwich.

Thirteen samples of milk were submitted during the year by the Borough of Prestwich for examination by the phosphatase test. All these samples were found to be sufficiently heat-treated.

FERTILISERS AND FEEDING STUFFS ACT, 1926.

Eight samples have been examined during the year, consisting of four samples of fertilisers and four samples of feeding stuffs. One sample of fertiliser showed slight variations from the declared statutory statements. The other samples satisfied the requirements of the Act.

PHARMACY AND POISONS ACT, 1933.

Three samples have been examined during the year. These consisted of one sample of disinfecting fluid and two samples of ammonia solution. The disinfecting fluid was satisfactory and the two samples of ammonia solution were both found to contain less than 5 per cent. by weight of ammonia (NH_3). Both samples were therefore exempt from the requirements of the Act and Rules, but in the case of one of them the label stated in error that the solution contained 5 per cent. w/w NH_3, and also that no licence was required for resale. The packer was requested by letter to amend the label so as to be consistent with the Act.

RAG FLOCK ACTS, 1911 and 1928.

During the year three samples of rag flock were submitted by the Borough of Stretford. Two samples showed figures for chlorine slightly in excess of the standard of 30 parts of chlorine per 100,000 parts of flock, fixed by the Rag Flock Regulations. The other sample was satisfactory.

MISCELLANEOUS SAMPLES

(from all sources).

Cereal Products (including farinaceous Baby Foods)...	4
Cod Liver Oil and Malt Extract	2
Contract Samples	40
Disinfectant	1
Fat Extenders	3
Meat Sandwich, Examination for poisons	1
Milk	2
Milk Products (including Baby Foods)....................	7
Mineral Waters	2
Sewage..	2
Solvents (Petroleum Act)	3
Soot Gauges	48
Sulphur Dioxide Candles......................................	24
Water (Drinking)	87
Water (Swimming Bath)	180
Miscellaneous	3
	409

Contract Samples.

Cocoa	5
Floor Polish	6
Floor Sweeping Compound	5
Furniture Cream	2
Liquid Metal Polish	4
Lysol	3
Meat Extract	5
Scouring Powder	5
Scouring Tablets	2
Turpentine Substitute	3
	40

Forty samples were examined in connection with the commodities purchased by the Central Purchasing Committee. The chief consumers of the materials are the Health Department and the various City Institutions, and samples were examined primarily to ascertain whether they were in accordance with the relevant specifications.

" Fat Extenders."

During the present shortage of edible fats various means have been devised for making the normal allocation of fats to bakers and confectioners "go further." A very considerable trade appears to have grown up in glycerine monostearate either in the solid form, or, more conveniently for the user, in the form of an emulsion with water. These emulsions contain about 90 per cent. or even more of water. The method of use appears to be to replace a portion of the fat, in the normal recipe of a cake, with the emulsion. From the consumer's point of view the result is a cake of reduced food value (at any rate reckoned from the total calories available). From the baker's point of view, a reduced fat content economises fat without necessarily causing a corresponding loss of texture in the cake. It is supposed that the emulsions are more effective when the fat-globule size is reduced to a considerable degree by some form of homogeniser. The effectiveness of the fat-extender is similarly enhanced if the edible fat allocation is emulsified and homogenised along with the glycerine monostearate. Another fat-extender examined was a proprietary article consisting of a refined and slightly modified spermaceti. Here again it was the emulsifying power of the product which was employed for the purpose of incorporating water into the available fat allocation. A third device was exemplified by a " fat concentrate " sold to confectioners. In this case the article consisted of a soft edible fat with which had been incorporated a flavouring agent. It was claimed that one part of the " concentrate " could be used to replace three parts of ordinary fat. The only justification for the claim appeared to be that the cakes would have a rich " buttery " flavour as if more fat had been used.

Solvents.

(Examined for the purpose of the Petroleum Consolidation Act, 1928).

Certain sections of the Act are concerned with the safe storage of products giving off an inflammable vapour. The Act requires that suitable storage vessels shall be employed and that other precautions shall be observed ; and provides that a licence must be obtained from the local Authority. It is the duty of the local Authority's officer (in Salford, the Weights and Measures Inspector) to inspect and generally to enforce the provisions of the Act. The products often met with in this connection include such things as rubber solvents, certain quick-drying varnishes and lacquers, and some solvents used for example by manufacturing chemists. A somewhat anomalous position may arise from the fact that while two solvents are equally capable of yielding an inflammable vapour, one may by definition be governed by the Act, while another may escape. Analyses are therefore carried out to determine whether products come under the definition of Petroleum :—" Petroleum includes crude petroleum, oil made from petroleum, or from coal, shale, peat or other bituminous substances, and other products of petroleum."

SWIMMING BATH WATERS.

During the year 1947, Pendleton baths were reopened for public use, and the facilities for swimming were thus brought back to full pre-war capacity. At all the baths the system of continuous purification is in use, and samples were examined with the Ministry of Health recommendations in view (" Purification of the Water of Swimming Baths," 1929). Briefly, these recommendations are that the water in the bath itself shall be maintained so as (1) to contain between 0·2 and 0·5 parts per million of free chlorine, (2) to be alkaline to methyl orange but free from caustic alkalinity, (3) to be of a clarity such that a 19 S.W.G. platinum wire can be seen through a depth of six feet, and (4) to be fully aerated, sparkling and attractive in appearance. The maintenance of a midly alkaline condition is important to counteract the development of acidity in the water caused by the addition of aluminium salts and chlorine. Acidity sometimes gives rise to complaints of smarting eyes, wrongly attributed to excess chlorine. A pH value between 7·0 and 8·0 will fulfil the recommendations and give adequate protection.

One hundred and eighty samples were examined during the year (including four from the Borough of Eccles). Samples from the baths in use were tested once a week during the summer period extending from May to September, and once a month for the remainder of the year. One hundred and eight samples showed only slight variations from the standards for free chlorine and alkalinity indicated above. One sample, however, was entirely devoid of free chlorine, 31 samples showed a free chlorine content exceeding one part per million (sometimes intentionally as indicated below), and in three samples the free chlorine exceeded two parts per million. Figures of analysis were communicated to the Baths Superintendent and any noteworthy divergencies were promptly brought to his attention.

A higher content of free chlorine was considered justifiable during the increased incidence of infantile paralysis as a general hygienic precaution and the bacteriological results reported by the City Pathologist were among the best ever obtained for these baths. Running parallel with these additional precautions and very considerably increasing their effectiveness, was the fall in attendance at baths during the peak of the " scare " period.

DRINKING WATER.

Eighty-seven samples of drinking water were examined during the year. This number includes 23 samples submitted for the usual monthly full chemical analysis of the public supply, and also 10 other samples for complete examination. Other samples included in the total were examined only for the presence of free chlorine which was of interest in relation to bacteriological samples taken at the same time, or were examined for special purposes such as the presence of metals, fluorides, etc.

Water is supplied by Manchester Corporation Water Works from service reservoirs at Prestwich (Thirlmere water) and at Gorton Lower (Longdendale water). Average figures of analysis, compiled from monthly analyses, are as follows :—

TABLE 22.

(All results except pH value are expressed as parts per 100,000).

	Prestwich Supply.	Gorton Lower Supply.
Area of distribution	Pendleton and Broughton.	Salford, Regent Road.
Total Solid Matter	3·7	8·7
Chlorides (as Cl)	0·86	1·23
Available Chlorine (as Cl)	not greater than 0·005	0·017
Nitrates (as N)	0·02	0·04
Nitrites (as N)	trace	nil
Free and Saline Ammonia (as N)	0·002	0·003
Albuminoid Ammonia (as N)	0·003	0·005
Oxygen absorbed from acid permanganate 15 mins.	0·027	0·038
Oxygen absorbed from acid permanganate 3 hrs.	0·053	0·075
Temporary Hardness (as $CaCO_3$)	1·4	1·3
Total Hardness (as $CaCO_3$)	2·2	3·7
pH Value	6·9	6·6
Physical Characteristics	Clear, very slightly yellow. Faint earthy odour. Very slight or negligible deposit.	Faintly turbid, slightly yellow. Faint earthy odour. Slight deposit.
Microscopical Appearance of Deposit.	(Typically). A few diatoms and algal cells.	(Typically). Fine mineral particles, a little vegetable debris, a few diatoms and algal cells.

An area around Chapel Street receives water from service reservoirs at Audenshaw. This water either resembles the Longdendale water in composition, or corresponds to a mixture of Longdendale and Thirlmere water.

Judged on chemical composition, the water supplies may be accepted as wholesome. Aesthetically the characteristic cloudiness of the Longdendale water is undesirable. The cloudiness is subject to seasonal and climatic variations, and at its worst is considerable.

There have been occasions when " water-fleas " were numerous in the drinking supplies, but these occasions have been rare since the installation of new " micro-strainers."

The pH value of the waters has generally been well maintained near 7·0. When temporary lapses have been observed in pH value, lead has been determined in the water after standing overnight (approximately 12 hours) in lead pipes. The following tests were made in 1947 :—

pH	*Lead (Pb) parts per million.*
6·6	0·25
6·9	0·30
6·3	0·55
6·4	0·15
6·5	0·40
6·5	0·35

The amounts of lead found were satisfactorily low indicating that the water was not dangerously plumbo-solvent.

The water has been tested for fluorides, and the amount was found not to exceed 0·1 parts per million.

ATMOSPHERIC POLLUTION.

Sulphur Pollution.

Two hundred and fifty-two tests have been carried out during the year at Regent Road by the volumetric sulphur method and 24 monthly tests at Regent Road and Ladywell Hospital by the lead peroxide method. In the former process the sulphur dioxide present in the air is returned as parts per million, while by the latter method, atmospheric sulphur pollution is returned as milligrammes of sulphur trioxide per 100 square centimetres of exposed surface. Both processes show a very striking rise in the winter months, and the volumetric process, by which daily determinations are made, shows exceptionally high figures on foggy days, thus demonstrating the tenacity with which smoke pollution hangs over the City during these periods.

TABLE 23.

SULPHUR POLLUTION.

Month.	Milligrammes Sulphur Trioxide per 100 sq. cm. Daily Average.		Parts Sulphur Dioxide per million of air. Daily Average.
	Regent Road.	Ladywell Hospital.	Regent Road.
January	3·74	4·40	0·101
February	3·39	3·46	0·126
March	4·02	3·89	0·089
April	3·15	2·52	0·091
May	2·19	2·48	0·137
June	2·37	1·89	0·102
July	1·58	1·56	0·092
August	1·43	1·48	0·129
September	2·08	2·18	0·119
October	2·99	2·72	0·192
November	3·66	4·23	0·233
December	3·58	3·85	0·261

Examination of Soot Gauge Deposits.

The work of examining the deposits in the special gauges placed in various places in the City has been continued. Standard gauges are situated at Broughton Modern Secondary School, Salford ; Ladywell Hospital ; Drinkwater Park ; and at the Corporation Sanatorium at Marple, Cheshire.

In uniformity with the results expressed by other stations, of which there are a number scattered throughout Great Britain, the results are expressed in metric tons per square kilometre. The metric ton is equivalent to slightly more than the English ton, and there are 2·59 square kilometres to the square mile, so that to convert metric tons per square kilometre to English tons per square mile, it is necessary to multiply by 2·55, or roughly 2½.

Table 24 shows the average monthly results that have been obtained during the year. It will be observed that the deposits collected at Broughton Modern Secondary School, Ladywell Hospital and Drinkwater Park are very similar in amount and indicate a considerable amount of atmospheric pollution, whilst, as is to be expected, the deposit collected at Marple shows that the air there is relatively purer.

TABLE 24.

Soot Gauge Observations.

Monthly Averages—Metric Tons per Square Kilometre.

		Salford : Broughton M.S. School.		Salford : Ladywell Hospital.		Salford : Drinkwater Park.		Marple : Nab Top Sanatorium.	
Rainfall in millimetres		59·8		55·9		66·6		51·4	
Tar	Insoluble Matter	0·14	5·30	0·12	5·44	0·10	3·79	0·08	1·97
Carbonaceous matter other than tar		1·78		1·90		1·52		0·78	
Ash		3·38		3·42		2·17		1·11	
Soluble Matter		2·47		2·70		2·93		2·14	
Total Solids		7·77		8·14		6·72		4·11	
Sulphates	Included in soluble matter	0·91		1·10		1·15		0·69	
Chlorides		0·65		0·62		0·72		0·40	
pH		5·3		4·8		4·6		5·0	

Perhaps the most noticeable feature of the results is the acid nature of the deposits. This is shown by the pH value of the water collected. The pH due to the carbonic acid in the air would be about 5·5. Figures below this, therefore, indicate an acid deposit, and the higher figures an alkaline deposit. Considering that the Marple gauge is fairly well in the country and shows a general record better than those obtained in the City its acid rainwater is noteworthy. This shows how widespread may be the drift of acid smoke from the cities.

TABLE 25.

pH Values for the Four Stations.

Month.	Broughton M.S. School	Drinkwater Park.	Ladywell Hospital.	Nab Top Sanatorium.
January	4·4	4·4	4·4	6·0
February	5·3	4·0	4·4	4·8
March	4·0	4·0	4·0	4·0
April	5·7	5·0	4·8	5·9
May	6·4	4·3	4·4	6·6
June	6·6	6·4	5·5	5·3
July	5·5	4·3	4·4	4·3
August	7·4	4·4	7·2	4·2
September	5·5	4·8	4·8	5·2
October	5·4	6·4	5·4	4·3
November	3·8	3·9	4·1	5·1
December	4·0	3·8	4·4	4·1
Average for 1947	5·3	4·6	4·8	5·0

VENEREAL DISEASES SCHEME, ANNUAL REPORT 1947.

New Cases.

The number of new cases attending during the year 1947 was 2,343, a decrease of 612 from the peak figure of 1946. The figure is approximately equal to that of 1945 which was at that time the highest figure recorded since the clinic opened. I consider the abnormally high figure for 1946 was due to the main stream of demobilisation taking place during that year, and that, in general, the following two or three years can be expected to show a gradual reduction.

Of the total of 2,343, 1,128 were found to be suffering from Venereal Disease in one form or another, and 1,215 were classified as non-venereal. Venereal Diseases legally comprise Syphilis, Gonorrhœa and Chancroid. Non-venereal conditions seen include Non-Specific Urethritis, Abacterial Pyuria, Balanitis, Warts, Paraphimosis, Carcinoma of Penis, Non-venereal diseases of the Nervous System, and various types of Dermatitis.

As before, all cases classified as non-venereal, and where a risk of infection exists, are treated and kept under observation during the incubation period of Syphilis, e.g. (at least three months).

Analysis of the figures for Gonorrhœa and Syphilis respectively show an approximate reduction in each category of 25 per cent. relative to the 1946 figures, but they are still high compared with the figures for the war years. Figures for non-venereal conditions also show a slight reduction for the year.

Sex Incidence.

Eight hundred and seventy-five males and 253 females attended during the year suffering from Venereal Diseases. The above figures include patients who have had previous treatment at other centres.

Fresh Infections.

The definition of a " fresh infection " is one in which the disease is less than one year's duration, and an " old infection " conversely is over twelve months' duration. Of 732 new male venereal disease cases 701 were " fresh " infections, and of 232 new female cases of venereal disease, 180 were " fresh " infections. These figures do not include patients who have had previous treatment or congenital syphilis cases.

Attendances.

Total attendances for 1947 were 32,937. Of this total 6,851 were " intermediate " attendances and 26,086 were attendances for the Medical Officer's attention. The figure of " intermediate " attendances is easily the lowest recorded and this is satisfactory in so far as it reflects the shorter and more efficient treatment now available and the quickly declining need for long periods of treatment by " irrigation " with antiseptics. The figure of 26,086 attendances for the Medical Officer's attention is reduced compared with 1946, but is still a high figure and likely to remain fairly stable.

Defaulters.

The total defaulter rate for the year was 7·06 per cent. Of dangerous (i.e., " infectious ") defaulters, the male percentage was 0·61 per cent. and the female 2·0 per cent. Of non-infectious defaulters, the male rate was 6·7 per cent. and the female 4·5 per cent. Both male and female figures for dangerous defaulters are slightly increased over the previous year, but with that exception are the lowest up to date. The slight increase in " infectious " defaulters, and the larger increase in " non-dangerous " defaulters are due in great measure to the very efficiency of Penicillin itself, i.e., the quick disappearance of symptoms, and the resultant difficulty of persuading patients to attend for necessary tests of cure in the absence of obvious symptoms.

Syphilis.

There were 293 new cases of Syphilis attending for the first time and not previously diagnosed or treated at other centres.

Of this total, 213 were cases in an early infectious stage, i.e., primary, secondary, or Syphilis latent in the first year of infection.

Eighty cases were classified as chronic, including Endosyphilis, Tertiary and Visceral Syphilis, Neurosyphilis and Congenital Syphilis.

As in previous years, amongst acute male cases attending for the first time, the primary stage predominated (68 per cent.). Of acute female cases, 47 per cent. were in the secondary stage and 45 per cent. in the primary stage.

Congenital Syphilis.

Total new cases of Congenital Syphilis diagnosed and treated at the clinic since 1931, now number 328. New cases in 1947 numbered 13 (figure for 1946 also 13).

TABLE IX.

Cases of Congenital Syphilis from Item 3 of Forms V.D. (R) Classified in Age and Sex Groups.

Year.	Under 1 year.		1 and under 5 years.		5 and under 15 years.		15 years and over.		Total.		Grand Total.
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
1931	2	3	1	2	15	7	9	6	27	18	45
1932	—	2	1	5	9	13	2	3	12	23	35
1933	2	1	1	—	5	9	3	6	11	16	27
1934	3	—	1	1	3	4	6	—	13	5	18
1935	4	2	2	4	5	8	4	11	15	25	40
1936	3	1	—	—	3	2	6	4	12	7	19
1937	3	2	1	—	—	3	3	1	7	6	13
1938	1	1	—	—	1	—	2	6	4	7	11
1939	4	4	—	1	1	2	1	3	6	10	16
1940	1	—	—	—	3	1	1	1	5	2	7
1941	—	—	1	—	—	1	3	3	4	4	8
1942	—	6	1	2	—	4	6	6	7	18	25
1943	1	2	1	1	1	3	2	12	5	18	23
1944	—	—	—	—	2	1	2	2	4	3	7
1945	—	—	—	1	1	1	3	2	4	4	8
1946	3	4	—	1	1	—	1	3	5	8	13
1947	4	4	1	—	—	—	—	4	5	8	13
TOTAL	31	32	11	18	50	59	54	73	146	182	328

Treatment of Syphilis.

Drugs in routine use for the treatment of Syphilis include :—

(1) Penicillin (crystalline and ordinary) in Beeswax and Arachis Oil.
(2) Arsphenamine Diglucoside (Stabilarsan).
(3) Meta-amino-para-hydroxy-phenyl-arsene oxide (Mapharside).
(4) *Bismuth.*
    (*a*) Suspension Bismuth Oxychloride in Glucose.
    (*b*) Oil Soluble Bismuth (Stabismol).
    (*c*) Bismuth Salicylate (suspension in oil).

The treatment of acute Syphilis has remained, in all major details, the same as in 1946. A new and more concentrated oily Penicillin (300,000 units per cc.) has also been tried with success. Using this preparation 600,000 units are given in one injection daily for five to six days. Local reactions are minimal and in no case has the course of injections been suspended on this account. Each course of Penicillin is followed by one or more ten weekly courses of combined Arsenic and Bismuth. It has not been found necessary to give more than one course of Penicillin, Arsenic and Bismuth (12 weeks) to any acute male case of

Syphilis up to date. On the female clinic, however, the majority of patients require a higher dosage of Penicillin (4-8 million units) and often more than one course of Arsenic and Bismuth. Many of these cases are very late secondary or latent when first seen and the slower serological response to treatment is not surprising.

Localised or generalised urticaria continues to be seen not uncommonly after penicillin, and this reaction now appears to be due to the Penicillin itself and not to the oily base. It is easily and promptly controlled by the new anti-Histamine type of drugs (i.e., Benadryl, Anthistan).

The toxic effects of Arsenic and in particular exfoliative dermatitis are now lessened in severity by the new drug B.A.L. (British anti-lewisite) which was developed during the war by Professor Peters at Oxford and tried out at that time by several clinics including Salford Municipal Clinic.

Chronic Syphilis.

Drugs in use comprise Stabilarsan, Tryparsamide, Chlorostab, Collosol Iodine, Penicillin, and in occasional cases Penicillin with fever therapy.

The response of Neurosyphilis to Penicillin alone has been good. Cases of Dementia Paralytica, Tabes Dorsalis, Tabo-Paresis and Meningo-Vascular Syphilis have shown (with the exception of one or two very advanced cases) a remarkable response in the cerebro-spinal fluid findings. Following a dosage of Penicillin of between 5 and 9 million units, in 80-90 per cent. of cases the C.S.F. has been rendered normal or inactive within two years. The delayed beneficial effect of Penicillin on the C.S.F. extends, as Stokes has recently pointed out, up to a period of two to three years. Symptomatic benefit is greater also during the second year after treatment, and approximates to that given by Malarial therapy, whilst the dangers are non-existent. One hundred and fifteen examinations of the cerebro-spinal fluid were made during the year.

Gonorrhoea.

There were 624 fresh cases of Gonorrhœa during the year, comprising 511 male and 113 female. This figure is a reduction of 138 cases on the peak figure of 1946.

Treatment.

There was little change in methods of treatment during the year from those used so successfully in 1946. The treatment of choice is still a single injection of oily Penicillin 200-300,000 units, and the rate of cure with one injection is 92 per cent. approximately. Full-scale tests of cure over a period of six months are still considered essential. A final blood test at six months from the time of the original infection is of paramount importance, if a concomitant syphilitic infection (possibly masked by Penicillin) is to be completely excluded. Culture of the prostatic secretion—performed about four to five weeks after treatment—

is now a routine test of cure and a very valuable test. Gonococcal culture has also proved most useful as an additional diagnostic help in female cases, and in cases where possible legal difficulties may ensure. Intermediate treatment by means of local antiseptics is used but rarely for gonococcal infections in males, but in females, especially where there is a co-existent infection with Trichomonas Vaginalis or Monilia local measures are still of great service. In connection with T. Vaginalis and Monilia infections of the vagina a most promising line of treatment has been with U.F.I. (Urea Formal Iodide) powder. This treatment is still under review.

Chancroid.

There were 58 cases during the year, a decrease of 42 from the previous year.

Female Contact Tracing (Almoner's Report).

As in the immediate past, the Almoner has been responsible during 1947 for the follow-up of female defaulters and for medico social work in connection with the Venereal Diseases Service.

The number of visits this year is considerably less than in previous years. This is partly due to the fact that fewer new patients have presented themselves for treatment during 1947. The large number of visits paid in previous years was chiefly in connection with the young irresponsible type of girl who became demoralised in consequence of the influx of Allied Servicemen into the district. Such girls were often defaulters, and were very difficult to trace, as they seldom remained at one address for more than a few days. Fortunately with the general demobilisation and the departure of overseas men to their own countries, this class of patient is not so frequently infected.

The follow-up of Syphilitic women who have become pregnant is carefully carried out and no effort is spared to ensure that they attend for adequate treatment before their babies are born. In most of these cases during 1947 sufficient treatment has been given to safeguard the baby. The exceptions have been cases of women who were unknown to the Department before the birth of their infants.

The social work done in regard to children suffering from Congenital Syphilis is persistent and regular. There have, nevertheless, been two cases of complete default. In other instances the attendance has been so intermittent that the treatment given has been totally inadequate.

It is felt that, in the case of children particularly, some form of compulsion might usefully be instituted to secure attendance. Other forms of child neglect are punishable by law and often a Health Visitor or Social Worker can obtain the co-operation of parents by the mere possession of such power without resorting to its use. In the case of Venereal Disease, however, parents are frequently aware that no compulsory powers exist and no legal action can be taken.

It may be of interest to give some examples of the difficulties encountered by the Almoner in her endeavours to persuade parents to bring their children for treatment.

" Some of the children defaulting from treatment live in districts which are a considerable distance from Salford (Leigh, Bolton, etc.). If the default is thought to be on account of financial difficulty it is usual to offer to pay fares and even to arrange with the Health Authorities of the patient's home town to provide transport by ambulance. Distance is of course not the only reason for default and many of these children fail to come for reasons given under the following headings.

" The mothers of congenital cases are often suffering from a deep sense of injury and resentment. They feel that as they and their children have acquired the disease through no fault of their own they should not be put to the trouble and indignity of attending a Venereal Disease Centre. Two particular cases of this type have been persistently visited (34 and 35 times respectively) and much patient persuasion, reasoning, and even threatening have failed to secure continued attendance and adequate treatment.

" Children whose attendance has been fairly good during their early years frequently become defaulters on leaving school.

" Children brought regularly for treatment during their first two or three years often default when their mothers have another child—the mother has less time to spare, finds it difficult to bring more than one child and often has nobody with whom she can leave her other children.

" In some cases the parents are mentally dull and it is difficult to impress them with the importance of securing treatment for their children.

" Illegitimate children are often left with grandparents and neighbours whilst their mother is working. In these cases, the secrecy which is observed in regard to all Venereal Disease treatment is a definite drawback. The children often appear to be in reasonably good health, and the grandparents can see no point in taking an apparently well child to see a doctor. Neighbours are usually unaware that any treatment is necessary.

" In other cases default is due to nothing more or less than complete apathy on the part of the mother. She just promises to bring the child and fails to do so. In one such case 45 visits were made."

A total of 354 visits were paid to the homes of 164 patients, and 102 patients returned for treatment as a result of the visit.

A series of three " defaulter letters " has been devised. The first of these is sent within a few days of the first default, and, if unsuccessful, quickly followed by the second and third letter, the latter announcing that the Almoner will call if default continues. The " returns " secured by these letters are as follows :—

	Number sent.	*Patients returned for treatment.*
First letter	528	219
Second letter	297	84
Third letter	145	45

Each new patient is interviewed at her first attendance with a view of ensuring that she continues to attend for whatever treatment may be necessary.

Male Contact Tracing and Defaulters.

This work has been continued during the year 1947, the third full year since it was inaugurated. At present there are no compulsory powers to deal with highly infectious defaulters, and it is to deal with this problem that male contact tracing was undertaken. A short table is included :—

	Syphilis.	*Gonorrhoea.*	*Chancroid.*	*Service Cases.*	*Total.*
(1) Number visited	68	78	5	37	188
(2) Number contacted	43	43	4	31	121
(3) Number attending subsequently	21	15	1	20	57

Hospital Accommodation.

E.1X and E.2X wards at Hope Hospital have remained in use during the year and are visited weekly by the Venereal Diseases Officer and Assistant Medical Officer.

The dermatological out-patient clinic at Hope Hospital (Dr. Gill) continued during the year, and the children's dermatological wards were visited weekly.

General Observations.

The Salford Municipal Clinic is one of the busiest and largest of its type in this part of the country. Every type of modern treatment for Venereal Disease is available, and is both free and confidential.

Instruction is given by the Venereal Diseases Officer to post-graduates working for the Ministry of Health Certificate, and during the past year five post-graduates attended the clinic for the three months' course of teaching.

Lectures and clinical demonstrations are given to the nursing staffs at the following hospitals—

(1) Hope Hospital.

(2) Lake Hospital, Ashton-under-Lyne.

(3) Park Hospital, Davyhulme.

I am glad to report that there has been a further drop in cases of infectious Hepatitis and only three cases occurred from a total of 32,937 attendances.

Two cases of Arsenical Dermatitis were notified during the year and treated successfully with B.A.L.

In October, cases of dermatological interest and also Venereal Disease cases were shown at the clinical meeting of the Hope Hospital Medical Society. Lectures were also given by the Venereal Diseases Officer for the post-graduate courses for general practitioners held by the University of Manchester, and arranged by the Dean of Post-graduate Study.

Finally, I wish to thank the Assistant Medical Officers, Nurses, Clerical Staff and Orderlies for their loyal and efficient work.

The Annual Return to the Ministry of Health, Form V.D. (R) for 1947, is attached.

APPENDIX I.

RETURN RELATING TO ALL PERSONS WHO WERE TREATED AT THE TREATMENT CENTRE AT SALFORD DURING THE Y THE 31ST DECEMBER, 1947.

	Syphilis.		Soft Chancre.		Gonorrhœa.		Non-venereal or undiagnosed conditions.		Tot
	M.	F.	M.	F.	M.	F.	M.	F.	M.
1. Number of cases on 1st January under treatment or observation	476	430	21	—	349	134	199	121	1,045
2. Number of cases removed from the register during any previous year which returned during the year under report for treatment or observation of the same infection	17	4	—	—	—	—	—	—	17
3. Number of cases dealt with for the first time during the year under report (exclusive of cases under Item 4) suffering from :—									
Syphilis, primary	96	33	—	—	—	—	—	—	96
,, secondary	36	34	—	—	—	—	—	—	36
,, latent in 1st year of infection*	9	5	—	—	—	—	—	—	9
,, all later stages	22	45	—	—	—	—	—	—	22
,, congenital	5	8	—	—	—	—	—	—	5
Soft Chancre	—	—	58	—	—	—	—	—	58
Gonorrhœa, 1st year of infection	—	—	—	—	511	113	—	—	511
Gonorrhœa, later	—	—	—	—	—	2	—	—	—
Non-venereal conditions	—	—	—	—	—	—	833	359	833
Conditions remaining undiagnosed at 31st Dec.	—	—	—	—	—	—	—	—	—
4. Number of cases dealt with for the first time during the year under report known to have received treatment for the same infection, or to have been under observation, at other Centres, or Service Hospitals, or by General Practitioners approved under Ministry of Health Circular 2226	92	11	4	—	42	2	22	1	160
TOTALS OF ITEMS 1, 2, 3 AND 4	753	570	83	—	902	251	1,054	481	2,792
5. Number of cases discharged after completion of treatment and final tests of cure or after diagnosis as non-venereal	79	28	44	—	303	145	680	361	1,106
6. (*a*) Number of cases which ceased to attend before completion of treatment and were, on first attendance, suffering from :—									
Syphilis, primary	9	4	—	—	—	—	—	—	9
,, secondary	4	11	—	—	—	—	—	—	4
,, latent in 1st year of ,, infection*	2	1	—	—	—	—	—	—	2
,, all later stages	5	20	—	—	—	—	—	—	5
congenital	—	2	—	—	—	—	—	—	—
Soft Chancre	—	—	—	—	—	—	—	—	—
Gonorrhœa, 1st year of infection*	—	—	—	—	2	10	—	—	2
Gonorrhœa, later	—	—	—	—	—	—	—	—	—
6. (*b*) Number of cases under treatment or observation which died:—									
From the disease	3	—	—	—	—	—	—	—	3
From treatment	—	—	—	—	—	—	—	—	—
From other causes	4	2	—	—	1	—	—	—	5
7. Number of cases which ceased to attend after completion of treatment but before final tests of cure	63	19	6	—	113	18	—	—	182
8. Number of cases transferred to other Centres, or to institutions, or to care of private practitioners	112	26	23	—	206	8	171	2	512
9. Number of cases remaining under treatment or observation on 31st Dec.	472	457	10	—	277	70	203	118	962
TOTALS OF ITEMS 5, 6, 7, 8 AND 9 (These totals should agree with those of Items 1, 2, 3 and 4)	753	570	83	—	902	251	1,054	481	2,792
10. Number of cases in the following stages of syphilis **included in Item 6** which failed to complete one course of treatment of either penicillin or of arsenic and bismuth :—									
Syphilis, primary	3	3	—	—	—	—	—	—	3
,, secondary	2	6	—	—	—	—	—	—	2
,, latent in 1st year of infection*	—	—	—	—	—	—	—	—	—
,, all later stages	—	3	—	—	—	—	—	—	—
,, congenital	—	—	—	—	—	—	—	—	—

APPENDIX I—*continued.*

elating to all Persons who were Treated at the Treatment Centre at Salford during the Year ended the 31st December, 1947.

	Syphilis.		Soft Chancre.		Gonorrhœa.		Non-venereal or undiagnosed conditions.		Totals.		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Totals.
r of attendances :— or individual attention of he medical officer(s).......	7,721	7,768	374	—	4,275	1,188	3,169	1,591	15,539	10,547	26,086
or intermediate treatnent, *e.g.*, irrigation, lressing........................	376	—	213	—	1,183	2,306	1,356	1,417	3,128	3,723	6,851
Attendances	8,097	7,768	587	—	5,458	3,494	4,525	3,008	18,667	14,270	32,937
ents :— Total number of persons idmitted for treatment luring the year	111	57	3	—	2	2	7	8	123	67	190
Aggregate number of "in-patient days" of treatnent given	1,015	1,260	16	—	4	88	146	41	1,181	1,389	2,570

							Other Diseases.				
							M.	F.			
r of cases treated with in...............................	246	197	—	—	518	111	28	39	792	347	1,139

	Under 1 year.		1 and under 5 years.		5 and under 15 years.		15 years and over.		Totals.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
r of cases of congenital s in Item 3 above classicording to age periods.....	4	4	1	—	—	—	—	4	5	8

	Microscopical.		Cultural for Gonorrhœa.	Serum.		Cerebro-spinal fluid.	Others for diagnosis of Venereal Disease. Kahn Tests.
	for Syphilis.	for Gonorrhœa.		for Syphilis.	for Gonorrhœa.		
ogical Work :— Number of specimens examined at, and by the nedical officer of, the Treatment Centre...........	555	4,053	—	—	—	—	—
Number of specimens from patients attending at the Treatment Centre sent or examination to an approved laboratory........	—	—	481	5,599	994	115	5,599

r showing the Services Rendered at the Treatment Centre during the Year, Classified according to the Areas in which the Patients Resided.

County or County Borough (or in the case of persons residing than in England and Wales) inserted in these headings.	Salford.	Man-chester.	Lancs. C.C.	Cheshire C.C.	Bolton.	Other Areas.	British Seamen.	Foreign Seamen.	Total.
er of cases from each area inl under the following headings m 3 :—									
hilis....................................	145	28	79	6	—	2	24	9	293
: Chancre	18	12	10	1	—	—	12	5	58
iorrœha..................................	229	75	160	10	1	7	87	57	620
1-venereal and undiagnosed conons......................................	527	143	304	20	9	15	125	49	1,192
Total	919	258	553	37	10	24	248	120	2,169
number of attendances of all its residing in each area............	17,216	3,756	8,997	518	259	267	1,512	412	32,937

Syphilis, latent in 1st year of infection," applies to cases presenting no clinical sign of syphilis but discovered (by blood test, etc.) to have contracted this disease within the preceding 12 months.

DOMICILIARY MIDWIFERY, MATERNITY AND CHILD WELFARE, AND HEALTH NURSING SERVICE.

The high birth rate which was a feature of the statistics for 1946 (22·7 per 1,000) was exceeded in 1947 (24·2 per 1,000). The total number of births, 4,335, was the highest recorded in the City since 1926, when there were 4,511.

Unfortunately, the low infantile mortality rate recorded in 1946 (53 per 1,000) has not been maintained. The severe weather experienced in the first four months of the year combined with the fuel crisis, was associated with a high death rate among infants in the City. The total number of infant deaths for the year was 258, and of these, 118 occurred in the first four months of the year, 66 in the second four months, and 63 in the last four months. Of the 118 deaths occurring between January and April, 38 were due to bronchitis and pneumonia, 16 from gastro-enteritis and 13 from prematurity.

During the cold spell, six deaths occurred as the result of infants being in bed with parents. In three cases no separate cot had been provided for the infant, although this had been strongly advised by midwife and health visitor.

The total number of still-births notified in the City was 122, 33 by the domiciliary midwives and the remainder from Hope Hospital and nursing homes.

The number of maternal deaths was seven, exactly half the figure for 1946.

National Health Service Act, 1946.

A considerable increase in the health visiting staff will be required to undertake the additional duties which will be laid on health visitors when the Act becomes operative and to make the maternity and child welfare service adequate for the needs of the City. Not only will increase in staff be required, but also the establishment of new centres in areas where they have been needed for a long time. Additional sessions will be required at centres already established. This will entail the appointment of additional medical officers and other staff.

In the plans for the domiciliary midwifery service, it is proposed that the midwives now employed by the Royal District Nursing Institution should be taken over by the local authority and that, as soon as possible, a hostel should be provided to house these midwives and pupil midwives. It is hoped also that a hostel will be provided for the temporary housing of newly appointed midwives.

Other proposals include an improved dental service for mothers and young children in co-operation with the school health service and the employment of qualified workers to teach domestic subjects in the maternity and child welfare centres.

It is anticipated that the close co-operation which exists between this department and Hope Hospital will be continued.

DOMICILIARY MIDWIFERY SERVICE.

Staff.

During the year 28 midwives were employed in the domiciliary service. These included three midwives employed by the Royal District Nursing Institution and two temporary relief midwives.

During part of the year, from May to December, it was found necessary to employ two part-time maternity nurses to assist in the nursing of lying-in mothers.

In spite of this the service was short of the equivalent of 4·5 midwives during the year, if account is taken of the time spent on annual leave, sick leave, analgesia training, etc.

The total number of cases attended by midwives during the year was 2,228, as compared with 1,964 in 1946. One thousand two hundred and thirty-eight cases were delivered during the night and 989 during the day. The midwives acted as maternity nurses in 165 cases. The average number of cases taken by each midwife was 94·36.

In addition to deliveries attended by midwives, the following visits were paid :—Visits during the puerperium (33,901), ante-natal visits (5,332), special visits (962), visits paid by part-time maternity nurses (May to December) (951), total number of attendances at midwives ante-natal clinics (7,315).

Pupil Midwives.

Two domiciliary midwives were approved as teachers by the Central Midwives Board and arrangements were made for pupils to reside with them to take the practical training for Part II of the certificate of the Central Midwives Board. One pupil completed her training during the year and was successful in obtaining the certificate. Two pupils were in course of training at the end of the year.

Central Midwives Board Rules.

A new edition of the Central Midwives Board Rules was issued in September and contained a revised Section E which became operative on 1st October. Midwives before regarding themselves as maternity nurses or beginning to act as maternity nurses, must now give notice of their intention to do so to the local supervising authority. The " Lying-in Period " is now defined as meaning a period being not less than 14 days and not more than 28 days after the end of the labour during which the continued attendance of the midwife on the mother and child is requisite. Arrangements have been made for the midwife to be notified by the health visitor of any condition arising in mother and child during the 28 days of the puerperium as it is not possible for midwives to attend cases for longer than 10 days, owing to the increased number of births.

Notifications by Midwives.

Medical Aid.—Medical assistance was sought by the midwives in 884 cases, in 676 for the mother and 208 for the infant.

Still-births.—Thirty-three still-births were notified during the year.

Neo-natal Deaths.—Twenty-three neo-natal deaths were notified, the causes being :—Prematurity (12), pulmonary atelectasis (1), congenital defects (2), congenital debility (4), other causes (4).

Artificial Feeding.—Forty-three notifications were received that it had been found necessary for the infants to be put on either artificial or partly artificial food.

Other Notifications in Connection with the Maternity Service.

Ophthalmia Neonatorum.—Twenty-three cases of ophthalmia in the new-born were notified. Three were notified by the staff of Hope Hospital and 13 were infants attended by municipal midwives. Seven cases were notified by the Manchester Royal Eye Hospital of which four were born in hospital and three at home. In these cases the condition developed after the infant had been discharged from the hospital or the midwife had finished attending. Twenty-two cases recovered without any damage to the eyesight ; one was still under treatment at the end of the year.

Pemphigus Neonatorum.—Five cases of pemphigus were notified during the year, all being infants delivered by municipal midwives. All recovered.

Puerperal Pyrexia.—Forty-eight cases were notified during the year. Forty occurred in hospital, seven were cases attended by municipal midwives, and one was a case of septic abortion. Six of the seven cases attended by midwives were removed to the Isolation Hospital and the seventh was nursed at home by district nurses.

Mobile Obstetric Unit.

The " Flying Squad " was called out on six occasions to cases attended by municipal midwives, to three cases of post-partum hæmorrhage, two cases of intra-partum hæmorrhage, and one case of shock. All made satisfactory progress.

Maternal Deaths.

The causes of the seven maternal deaths occurring in the City were as follows :—

*1. (a) Septicæmia.
(b) Puerperal Sepsis.
2. Myocardial failure.
Mitral stenosis.
3. (i) (a) Obstetric shock.
Post-partum hæmorrhage.
Adherent placenta manually removed.
(ii) Diabetes Mellitus.
*4. Mitral stenosis producing acute heart failure.
*5. Obstetric shock.
Post-partum hæmorrhage.
Placenta retained.
*6. Septic abortion following a fall.
*7. (i) (a) Uræmia.
(b) Chronic Nephritis.
(c) Termination of pregnancy.

*A post-mortem examination was carried out in cases marked thus.

MATERNITY AND CHILD WELFARE CLINICS AND CENTRES.

Ante-Natal and Post-Natal Clinics.

The increase in the attendances at ante-natal clinics noted in the report for 1946 continued. During 1947, 2,153 individual patients attended, and there were 6,844 consultations, the total attendances were 7,851.

Seven ante-natal sessions are held weekly. It is hoped to start an additional ante-natal session at the Ordsall Centre and a midwives clinic at the Encombe Place Centre early in the New Year.

At all ante-natal clinics specimens of blood for Wassermann reaction and for Hæmoglobin estimations are taken from mothers attending, whether they have attended for a previous pregnancy or not. Since May a test for the Rhesus factor has been carried out on all new cases. A preliminary test for the Rhesus factor is made by the City Pathologist and his staff. A second specimen is taken from all patients reported to be Rhesus negative. This is sent for confirmatory test to Dr. Stratton at the Regional Transfusion Laboratory at the Manchester Royal Infirmary. A total of 989 mothers attending the municipal ante-natal clinics were tested for Rhesus factor, 95 of these were found to be Rhesus negative. One thousand four hundred and ninety-eight specimens of blood were taken for Wassermann tests, 13 were found to be strongly positive and these patients were referred to the Municipal Clinic.

Attendances at post-natal clinics were better than in 1946, but are still too low. During 1947, 248 individual patients attended and there were 276 total attendances, the patients being seen on each occasion by a medical officer. The special clinic at the Royal District Nurses Home continued to function, the total number of attendances was 103.

Child Welfare Centres.

The total attendances of children under one year (34,774), show an increase of 2,437 over those for 1946 when the total attendances was 32,374. The total attendances of children over one was 8,472 in 1947 as compared with 11,624 in 1946. The number of individual children seen in 1947 was 6,849.

I would again repeat the statement which has appeared so often in these reports, that new clinic premises are badly needed in several areas in the City, but most particularly in the Irlams-o'th'-Height area and in Langworthy Ward. There is only one Centre in Broughton and this serves a very wide area ; at least two subsidiary centres are needed, one in the Kersal area and one in Lower Broughton.

Proposals for the use of the partially completed Seedley Library as a maternity and child welfare centre have been submitted to the Minister of Health.

Breast Feeding Clinic.

Since its opening in 1943, this clinic has proved to be of great value. Although the total number of mothers who attend is small it should be realised that most, if not all of them, would have abandoned breast feeding in the very early stages. The clinic is of particular help to the young mother with her first baby, who is having difficulties with feeding. The restful atmosphere of the clinic, together with the helpful and kindly advice, calm her fears and anxieties and give her confidence to continue her natural function.

The total number of mothers who attended this clinic during 1947 was 161. This is a decrease of 62 on the 1946 figures. The report deals with 116 mothers who were " carried over " from 1946 and 81 whose infants were born between 1st January and 30th June, 1947, that is a total of 197. Sixty-three of these breast-fed their babies for six months ; they might not have done so if they had not attended the clinic. Thirty-four fed their babies for 3½ months, 75 failed entirely. It is not possible to give a report of the remaining 25 patients as the mothers left the Salford area and have not, therefore, been followed up. Over 50 per cent. of the cases are mothers whose infants were born in Hope Hospital.

Psychological Clinics.

During the year two sessions were held weekly by Miss Schofield—one at Regent Road clinic and one at Broughton clinic.

At the Regent Road clinic there were 65 new cases and 154 subsequent attendances ; at the Broughton clinic there were 67 new cases and 93 subsequent attendances.

Advice has been given to many mothers in the waiting rooms at each of the clinics, and several very neurotic mothers given treatment with considerable benefit to their children.

A large number of feeding problems revealed the fact that many mothers are over-anxious. Enuresis cases indicated anxiety in children, resentment at mothers' fussiness in some, and jealousy on the arrival of a new baby in others.

Most of the aggressive behaviour problems appeared to be directly due to the housing problems, which is responsible for so many frustrations. Well-meaning grandparents often cause much distress to the younger generation and the younger generations to the older.

A number of mothers were found to be very emotional. These were the type who had " read " psychology and " knew " all about their children, but some commonsense advice solved more of their problems than their knowledge of psychological treatment.

Visits were paid to two day nurseries and two nursery schools. Problems connected with certain children attending were discussed and methods of treatment suggested.

A talk on the " Thoughts and Feelings of the Handicapped Child " was given by Miss Schofield to the Parents Club. A similar talk was given to medical officers and health visitors.

Birth Control.

Forty-nine mothers were referred for advice to the Manchester, Salford and District Mothers' Clinic by the medical staff of this department. Twenty-seven attended.

Dinners for Expectant and Nursing Mothers.

This service continued to be very efficiently carried out by the members of the Ladies' Public Health Society and their friends at Pendleton and Ordsall centres.

The number of dinners served were as follows :—At Pendleton, 5,875 dinners were served to mothers, 3,805 to children. At Ordsall, 5,476 dinners were served to mothers, 1,689 to children.

THE UNMARRIED MOTHER.

During the year, 102 illegitimate pregnancies were notified to the department. The number of married women notified was 24.

It must be emphasised that these do not represent all the cases that exist in Salford, but only those which are known to the Health Department.

	Registrar-General. Number of illegitimate births.	*Health Department. Number of illegitimate pregnancies known.*
1945	273	115
1946	239	101
1947	284	102

Allowing for the comparatively small number of women who are found to have illegitimate children after their birth, and those who come to Salford for confinement only, these figures do illustrate that the incidence of illegitimacy is in excess of the figures available in the Health Department. The source of notification was as follows :—Hope Hospital (50), maternity and child welfare medical officers (10), health visitors (4), midwives (10), welfare officers (8), Civic Welfare (5), own accord (15), total (102).

It will be seen that Hope Hospital continues to be the largest source of notification with roughly 50 per cent. of the figures given. The remainder are fairly equally divided amongst the other sources, but it is pleasing to see that 15 women came to the Department of their own accord.

The next table shows the incidence of illegitimate pregnancies amongst the age groups.

Age Group.	Single Women.				Married Women.			
	No.	1st Preg.	2nd Preg.	3rd Preg.	No.	1st Preg.	2nd Preg.	3rd Preg.
16 years and under	3	3	...	...	...	...	...	...
17-18 years	7	6	1	...	1	1	...	...
19-20 years	19	18	1	...	...	...	...	...
21-25 years	22	18	3	1	5	5	...	...
26-30 years	21	11	10	...	8	3	4	1
Over 30 years	6	5	...	1	10	5	5	...

Noticeable facts from this table are :—

(1) The number of single women under 20 who have illegitimate children.

(2) The comparatively large number of single women between 26 and 30 who have a second illegitimate child.

(3) The incidence of illegitimacy amongst married women is greater in the higher age groups.

Of the 102 women interviewed prior to the birth of their child, 35 made application for the child to be adopted when born. Fifteen of these children have been placed with prospective adopters. Of the remaining 20 :—

Twelve decided to keep their babies.

Three were not born by December 31st.

Two were found to be unsuitable for adoption. In one case the mother's family mental history was bad and in the other the mother was syphilitic.

One made arrangements through another Local Authority.

One died.

One baby recently born was premature and very small, but it is available for adoption if it proves suitable.

As a point of interest, four of the expectant mothers had illegitimate twins—all four are keeping their babies.

Thus, of the 102 women interviewed prior to the birth of the child, 82 have had their babies and kept them.

Twenty of these mothers have been successful in obtaining affiliation orders, and three have cases pending.

The orders vary as follows :—

2 were made for 15s. per week.
6 ,, ,, 12s. 6d. ,,
10 ,, ,, 10s. ,,
1 was made for 7s. 6d. ,,
1 ,, ,, 5s. ,,

It will be seen, therefore, that of the mothers known to the Health Department, only 25 per cent. have been successful in obtaining affiliation orders in 1947. This may seem disappointing, and may be accounted for by :—

1. Cases having insufficient evidence to warrant taking them to Court.
2. The father of the child is a casual acquaintance.
3. The mother is living with, and is maintained by the putative father as his wife.
4. The strong prejudice against court proceedings evinced by the mothers, even when they have evidence against the putative father.

It is heartening to see that so many illegitimate children remain with their mothers. If the mother is single, and living at home, and the child can be absorbed into the family, a happy, secure life can often be assured. The illegitimate child of a married woman is not so fortunate, as, in the majority of cases, the husband remains adamant in his attitude to another man's child : and the lot of the child of an unmarried " wanderer " is also none too pleasant.

The need, in Salford, of a hostel, for women with children, where the children could remain whilst the mother works, is still urgent. Short-term accommodation is still provided by " Oakhill " Salvation Army Home and St. Teresa's Convent—but the need is for a non-religious hostel, where accommodation for an indefinite period can be provided, and which will help the mother to become self-supporting and self-respecting.

ADOPTIONS.

During the year there have been 36 applications from parents for assistance with the adoption of their children. This number is quite separate from the mothers who applied pre-natally for their children to be adopted. This number is nine fewer than in 1946.

Of the 36 children :

Twenty-two have been placed for adoption.
Nine mothers have changed their minds and wish to keep the children.
Four were found to be unsuitable.
One moved to Leicester.

This number includes 12 mothers from " Oakhill " Salvation Army Home, who wanted their babies adopting.

This Department now arranges adoptions for all the " Oakhill " mothers who desire them, and whose children are deemed suitable.

During the year there have been applications for assistance from 49 couples wishing to adopt a child. There were 57 such applications in 1946 and 46 in 1945.

Of the 49 :

Twenty-three wished to adopt baby girls.
Sixteen wished to adopt baby boys.
Ten wished to adopt a baby of either sex.

There were no applications to adopt twins.

Thirty-one couples have had children placed with them.

(Note.—The total number of children placed for adoption in 1947 was 37—six were placed with adopters who applied in 1946.)

Seven prospective adopters were deemed unsuitable.

Four applications were cancelled by prospective adopters themselves.

Two couples were not old enough to adopt a child.

One couple wanted to adopt a girl of nine years—but this Department is seldom asked to find a home for a child of this age.

Four prospective adopters were on the waiting list at the end of the year.

Twenty-eight adoptions have been legalised in 1947 and 17 cases are pending.

(NOTE.—The total of adoptions made legal in 1947 plus cases pending, i.e., 45, exceeds by eight the number of children placed in 1947. This is due to children placed for adoption in 1946, whose adoptions were legalised in 1947.)

Number of prospective adopters	49
Number of children placed	37
Number of adoptions made legal	28

Special Adoptions.

(1) The Department is co-operating with the League of Coloured Peoples in London, in endeavouring to place for adoption with a coloured family, a coloured boy of three years old.

(2) The Department has arranged this year for the re-adoption of a five-year-old boy, whose adoptive mother died, and whose adoptive father did not feel able to keep him.

Where a child has been taken from a mother for adoption, some attempt has been made to fill the inevitable gap in her life, as well as to provide beneficial recreational facilities.

The Y.W.C.A. in Manchester have proved very helpful in these matters, and several girls have become enthusiastic members.

Evening classes have also been arranged, and in one case, membership of a political club " filled the bill."

These ways of spending leisure hours obviously do not appeal to all types of girls, but in each of the above-mentioned cases, progress is very satisfactory.

Adoptions in Salford arranged by Outside Authorities.

There have been 19 requests from outside Adoption Societies for reports on home conditions of prospective adopters living in Salford.

Catholic Rescue and Protection Society	9
Maternity and Child Welfare Department, Manchester	7
Lancashire and Cheshire Child Adoption Council	1
Maternity and Child Welfare Department, Southport	1
Maternity and Child Welfare Department, Stretford	1

Four of the proposed homes were not deemed suitable for the reception of a child.

Twelve children have been placed in approved homes during the year, and five of these adoptions have been made legal.

THE ILLEGITIMATE CHILD.

During the year 248 names have been added to the register of illegitimate children. Fifty per cent. of these were of 1947 births—the other 50 per cent. were children found to be illegitimate for the first time in 1947.

This makes a total of 788 illegitimate infants in the City who are known to this Department.

The scheme for notifying the Medical Officer of Health of the area concerned when an illegitimate child moves there, has been continued, and the majority of these removals have been confirmed.

	No. of Removals.	Removals confirmed.	Reply not yet received.	Impossible to trace.
Removals from Oakhill Salvation Army Home	37	36	1	–
Removals from St. Teresa's Home	62	57	5	–
Removals from individual homes in Salford...........................	41	33	2	6

The work in connection with the Unmarried Mother and her Child and with Adoptions has been undertaken in the late months of the year by the Social Worker who was appointed in July.

This worker has also undertaken a considerable amount of Miscellaneous Social Work. Cases dealt with have included assistance with Summonses and Maintenance Orders, tracing of missing husbands, co-operation with the Women's Section of the Ministry of Labour with regard to suitable employment for single women with children, work for psycho-neurotics, divorce enquiries and " forwarding " cases to appropriate bodies such as the Soldiers', Sailors' and Airmen's Families Association, Service Welfare Officers, Council of Social Service, etc. Baby clothes have been provided for several deserving cases and help in finding accommodation has sometimes been given.

INFANT LIFE PROTECTION—FOSTER-CHILDREN.

(a) Foster-children in Individual Homes.

In January, 1947, there were seven children fostered in individual homes in Salford, nine children were admitted to the register during 1947, and nine children were removed for reasons as follows :—

Four returned to their own parents.
One returned to the Waifs and Strays Society.
One reached the age of nine years.

Two were legally adopted by the foster-parents.

One was adopted through the Agency of the National Adoption Society in London.

One foster-child in Salford has been placed by the Ministry of Pensions (he is a war orphan) and that Ministry exercises the necessary supervision.

There were thus seven foster-children remaining on the register at the end of 1947.

There are no children with foster-mothers under the Council's scheme for assisted foster-mothers.

(b) Foster-children in St. Teresa's Home.

In January, 1947, there were 12 foster-children in St. Teresa's Home. Twenty-six were admitted during the year, and 18 were removed, leaving 20 on the register at the end of 1947.

All foster-children are visited once each month by the Health Visitor.

There were 81 visits paid to foster-children in individual homes during the year, and St. Teresa's Home was visited every month, with the exception of September.

PHYSIOTHERAPY.

It is a pleasure to be able to report a more successful year in the department. We were able to secure the services of two full-time physiotherapists from Denmark—one was appointed in March and the second in July. A part-time physiotherapist for six sessions per week was appointed in June.

With the help of the new staff, it has been possible to extend some of the services and to start others in a small way. It has now been found possible for instance, at two of the nursery schools, to treat children in their own school. The ante-natal and post-natal exercises are on a firmer footing and it is hoped that in time the mothers will come to look on these exercises as part of the routine of ante-natal care. The waiting list of babies and young children for sunlight treatment has been eliminated and it is hoped, in future, that waiting lists will be abolished.

The summer epidemic of acute anterior poliomyelitis has thrown additional work on the department. For the last four months of the year, one member of the staff attended each day at Ladywell Hospital to treat the cases there. After discharge from the hospital the children attend the clinic for treatment four times weekly and this has necessitated the arranging of extra sessions.

Neumann Neurode Exercises.

Sessions for these exercises were continued throughout the year, two at each of the three main child welfare centres. Treatment has also been given to children attending the day nurseries.

DAY NURSERIES.

During the year efforts have been made to reduce the number of places in the Day Nurseries in accordance with the new standards of spacing. This has not been easy as the demand for accommodation has continued to increase. By the end of the year, however, the number of places had been reduced from 300 to 265. It is difficult to keep the number of children actually attending to this figure : sometimes it has to be exceeded. At the end of the year there were actually 438 names on the waiting lists. The greatest demand for places are in the Broughton and Pendleton areas and new Nurseries in these areas are urgently required. The City Engineer has been consulted regarding suitable sites.

In admitting children to Day Nurseries, preference is given to the most urgent cases. Each applicant's home circumstances are checked from Health Visitor's reports.

Incidence of Infection.

On the whole the incidence of infection in the Nurseries has not been high during the year.

Three cases of acute anterior poliomyelitis occurred among the Nursery children during the epidemic which visited the City in the late summer. Howard Street, Hulme Street and Eccles Old Road Nursery had one case each. Howard Street Nursery was closed for three weeks, but it was not considered necessary to close the other two.

During October, 18 cases of enteritis occurred among the children attending Hulme Street Nursery. None of the children were seriously ill and no pathogenic organisms were isolated from the stools of those affected.

The following table shows the total number of cases of infection for the year :—

Month.	Disease.	Nursery affected.	No. of cases.
January	Measles	Howard Street	26
		Wilmur Avenue ...	24
		Fitzwarren Street	4
	Mumps	Fitzwarren Street	9
April................	Measles	Hulme Street	1
		Howard Street	2
May	Mumps	Eccles Old Road...	1
	Whooping Cough.................	Eccles Old Road...	1
August	Acute Anterior Poliomyelitis	Howard Street	1
		Hulme Street	1
		Eccles Old Road...	1
October	Non-Specific Enteritis	Hulme Street	18

Training of Nursery Students.

The staff of the Department have co-operated with the Education Department in the training of nursery students for the examination of the National Nursery Examination Board.

The new training centre at Acton Square was opened in February. The first full course for students from day nurseries and nursery schools began on March 3rd.

A refresher course was organised for students who had almost completed their training in accordance with the syllabus of the National Society of Children's Nurseries. This course included as much as possible of the " Further Education " part of the new training as could be done in the time available.

The syllabus of subjects in the new training is divided into two sections—a Health Section and an Education Section. The syllabus also provides for the " Further Education " of the students. The lectures in the Health Section are taken by one of the child welfare medical officers assisted by the supervisor of the nurseries and one of the nursery matrons. The practical work for the course is taken in the day nurseries.

Six of the day nursery students entered for the first examination held under the new regulations and five were successful in obtaining the certificate.

HEALTH NURSING SERVICE.

Staff.

One Superintendent Health Visitor.
One Deputy Superintendent Health Visitor.
Twenty-four Health Visitor/School Nurse/Tuberculosis Visitors.
One Premature Baby Nurse.
One School Clinic Nurse (Minor Ailments—Schools).
Three Clinic Nurses.
One Social Worker for work connected with the Care of the Unmarried Mother and her Child. (Appointed 5th July.)

Resignations.

Miss Sowerby, Deputy Superintendent Health Visitor, resigned in July to take up the appointment of Superintendent Health Visitor at Preston.

Two health visitors resigned to join the Tuberculosis Nursing Service in Manchester and one to join the Health Visiting staff of the Lancashire County Council.

Four clinic nurses resigned and one was transferred to the School Nursing Service.

Appointments.

Miss H. B. B. Peden was appointed Deputy Superintendent Health Visitor and took up her duties in October.

Four health visitors were appointed, three clinic nurses and one premature baby nurse.

A social worker possessing the B.A. degree in Administration, Manchester University, was appointed in July to undertake the work in connection with the care of the Unmarried Mother and her Child.

Student Health Visitors.

Four students entered for training in October under the Council's scheme. Arrangements were made with the approval of the Minister of Health, for these students to take the practical part of the course in Salford.

All three students appointed in 1946 were successful in obtaining the Health Visitor's Certificate in May this year. All completed their six months under contract and were asked to remain on the staff for a further six months.

Home Visiting.

The year's analysis of the work of the health visitors shows an increase in the amount of time spent on home visiting as compared with other years. This is due to two factors :—

(*a*) The figures for 1946 showed that an unduly large proportion of time was spent by health visitors on travelling to and from their districts to the Health Office. From March this year, arrangements were made for health visitors to remain on their districts until 4-30 p.m., then travel home direct, where they spend 30 minutes in writing up records of visits paid during the day. One hundred and eighteen working hours were saved in this way.

(*b*) The temporary employment of extra clinic nurses to staff clinics during the periods when health visitors were absent or had not been replaced.

The consequent increase in the number of visits paid during the year, compared with those paid in 1946, is as follows :—

	1946.	1947.	*Increase.*
Visits to Homes	31,231	42,084	10,763
Individuals Visited	39,646	52,672	13,026

School Nursing.

Combined health visiting with school nursing is now undertaken by eight health visitors in four wards in the City—Kersal, Mandley Park, Ordsall and Albert Park.

Nursery schools have been visited daily and nursery classes monthly.

Two clinic nurses were employed for the daily visiting of the nursery schools, but it was considered that the work would be better done by health visitors working in the area concerned. It was decided to replace the two clinic nurses by one additional health visitor, the visiting to be divided among the health visitors working in the vicinity of the nursery school and their districts reduced in size, thus creating a new district. It has been impossible to procure a health visitor to fill this vacancy.

School Clinics.

Daily sessions for the treatment of minor ailments have been held at Murray Street Clinic and at Marlborough Road School. Routine and special medical examination sessions have also been held on an average of one session each day at Murray Street Clinic. Clinic nurses are mainly employed for this type of work, thus relieving the health visitor/school nurse for educational and preventive work.

Tuberculosis Visiting.

Although the number of tuberculous patients in the City needing visiting has decreased slightly this year, more visits have been paid—3,284 as against 2,366 in 1946. This is not a matter for complacency, tuberculous patients in this overcrowded City need constant visiting to teach and encourage them to live wisely for their own sakes and for the sake of others.

Diphtheria Immunisation.

The scheme inaugurated in 1946, whereby health visitors and clinic nurses carry out Diphtheria Immunisation in the clinics and in the homes, has continued with good results. Statistics dealing with Diphtheria Immunisation are given elsewhere (see p. 132).

Post-Graduate Courses.

Members of the Health Nursing Service attended Post-Graduate Courses held at Manchester and Birmingham.

ALMONER'S REPORT 1947.

The year 1947 was the first full working year of the Department since it became responsible for combined social work in connection with Venereal Disease, Tuberculosis, Maternity and Child Welfare, and School Medical Services, together with the organisation of the Domestic and Home Help Scheme. The value of this co-ordination has been proved in many instances during the year. Patients seldom remain solely in the category in which they are first referred to the Almoner and facts elicited in one section of the work are frequently found useful in another. The nature of this form of Social Service has been dealt with at some length both by the present Almoner and her predecessor in previous annual reports. It is, therefore, proposed to devote most of this report to the newest service undertaken by the Department, namely, the Home and Domestic Help Scheme.

The figures given at the end of this Report will indicate that in most instances the work has expanded. The exception is that fewer visits have been necessary in the " Follow-up " of Venereal Disease cases. This is due partly to the fact that the incidence of the disease is lower than in previous years, and also because the number of patients of the young and irresponsible type, who caused so much concern during and immediately after the war is now somewhat reduced.

Home and Domestic Help Service.

This service has become more widely known and used during 1947. The terms " Home Help " and " Domestic Help " are apt to be confusing as both do domestic work in the home. To clarify this it may be said that Home Helps are employed under the provisions of the Public Health Act, 1936, and there is no specific Government grant for this purpose. Their work is confined to a home where there is an expectant or nursing mother. The Domestic Help scheme was inaugurated at the request of the Minister of Health and the cost of this service is borne by the Government. Domestic Helps are supplied in cases where there is sickness or infirmity due to age.

The Schemes are administered jointly and the personnel used as required for either service, the appropriate authority being charged with the cost.

The recruitment of Helps has proceeded steadily throughout 1947. Five women were employed full time and these were chiefly reserved for maternity cases, though they were used in 12 cases for urgent non-maternity cases. In addition, a total of 39 women have done part-time or casual work. The rate of pay in all cases being 1s. 6d. per hour. No retaining fee is paid.

Every effort is made to select the right type of woman for this work. Motherly, adaptable, industrious women between 35 and 50 make the best Helps. They must be trustworthy and discreet and have a sincere desire to be of service. They must in fact be the kind of person who in more leisurely days would have been the " good neighbour " and would have performed such services gratis. Such women are most frequently secured by personal recommendation, they are seldom to be found on the lists of unemployed women at the labour exchanges. The organiser is therefore constantly on the look out among colleagues in the Health Department and friends and acquaintances in the City for people likely to know suitable women.

In every case, before a Help is employed, the nature of the Service is carefully explained to her. She is encouraged to feel that she has an important part to take in the Health Service and that, whilst she is helping in a home, the good name of the service is in her keeping. She is also warned against gossiping about the affairs of the family she is serving.

The duties of the Help are briefly as follows :—

1. To keep the home clean and tidy.
2. To prepare and cook meals for the family.
3. To see that children attend school regularly and punctually and are kept clean and tidy.
4. To do washing. (She does not undertake arrears of washing.)
5. To do shopping.

The Help provides her own meals unless invited by the family to share theirs.

It will be seen that the whole of this work is directed towards helping families to come safely and happily through their various crises, vicissitudes and difficulties. Much has been achieved in this respect. It would be difficult to assess the contribution made by the service to the health and well-being of the community. There can be no doubt that much sickness and distress has been prevented and, what is more important, much health, happiness and comfort preserved by the ministrations of the Helps. A woman resuming her duties after confinement, illness, or discharge from hospital, will do so with much better heart if her house has been left thoroughly clean by the Help, and no accumulation or arrears of work await her or, as is often the case, face her husband on his return from work. The uses of adversity are said to be sweet, and many people are able to " shine " therein. Unfortunately, there are many more in whose cases continued adversity results in strained tempers, domestic frictions, and homes where children are unhappy.

Similary, as in the case of elderly people, from whom many applications are received, much physical and mental strain has been averted both in regard to the patients and those responsible for them. Many old people can, with a little help, manage to continue their own way of life, in their own homes and thus preserve the feeling of independence which is so precious to them.

In several cases Domestic Helps were sent to assist women with cardiac conditions. These women were quite able to maintain the supervision of their families and homes but had been warned by their medical advisers against doing heavy work. In these cases it is felt that work of lasting good has been done, in that the mother's life will be prolonged and the family circle will remain intact.

The scale used for the recovery of charges for the service is based on the one recommended by the Minister of Health in Circular 110/46, amended by further instructions from the Minister in regard to increased children's allowances. It is found, however, that an unfortunately large percentage of the cases investigated refuse the service when informed of the charge to be made. They appear to be afraid of committing themselves to pay for this service in addition to midwifery and, possibly, a doctor's fees. Many women, of course, do not receive a fair portion of their husband's wages and it is not at all unusual for a man whose earnings are in the region of £7 per week to give his wife £5 or less. The whole of the family expenditure—rent, clothing, shoe repairs, furnishings and hospital and doctor's bills, together with the expense of preparing for the new baby, has to be met from the wife's allowance. It is hoped that, after " the appointed day " when midwifery and medical services will be free of charge in the right of the husband's insurance, wives will feel more able to pay for domestic help of which they are often in such great need.

Investigation of domestic help cases has brought to light the many needs of lonely old people and much time has been devoted to helping them. In several cases, the visitor has found that occasional domestic help is insufficient to provide for their safety and even a moderate degree of comfort. In these cases the help of the Assistance Board and Civic Welfare Department has been sought and arrangements made for their admission to the Old People's Homes, or to hospital.

Much remains to be done in this field of work and one feels that a little domestic help before they get so worn and feeble would probably defer the time when the aged would become entirely dependent upon younger people. In this connection, it has been noticed that elderly people often experience great difficulty in procuring even the little food which they require. They are often unable to go out to the shops during the winter months. The public mind is becoming increasingly conscious of their needs and it is thought that within the next year or so a travelling meals service, and possibly a special officer to visit and arrange for the care of the aged, will be considered necessary.

The following figures indicate the extent of the work during 1947 :—

Convalescence arranged for —

104	School Children.		
9	Mothers with	one child.	
8	,, ,,	two children.	
1	,, ,,	three	,,
3	,, ,,	four	,,

Assistance given with clothing—

Children	90
Mothers	3
Tuberculosis patients	27

Tubercular patients assisted with beds and/or bedding	12
Arrangements made for care of children whilst mothers in hospital	10

Interviews with tubercular patients or their relatives *re*—

Food Priorities	1,355
Free Milk	412
Allowances 266/T	474
Housing Applications	149
Clothing and Bedding	56
Miscellaneous	126

Interviews *re* convalescence	401
New cases of Venereal Disease interviewed	617
Visits to homes of Tubercular patients	217
,, ,, Venereal Disease patients	354
,, *re* domestic and home help cases	369
Bedpans and rings loaned to patients	6

IMMUNISATION DEPARTMENT 1947.

The progress of the Immunisation Department has been satisfactorily maintained. During the year, 5,272 children aged 0-15 years were immunised, increasing the percentage from 81·3 per cent. at 31st December, 1946, to 84·6 per cent. at 31st December, 1947.

The scheme which commenced during the 1946 intensive campaign was continued. Special Diphtheria immunisation sessions were held, but facilities were available for immunisation to be carried out at any Child Welfare clinic if it was found impossible to attend at the time of the special session.

The following chart shows clearly the results of the year's work. The increases in the percentages of children immunised are most satisfactory.

	0-5 *Years.*	5-15 *Years.*	0-15 *Years.*
Number immunised during 1946	4,145	1,711	5,856
Number immunised during 1947	4,264	1,008	5,272
Total number immunised at 31st December, 1946	9,549	21,746	31,295
Total number immunised at 31st December, 1947	11,589	22,098	33,687
Per cent. immunised at 31st December, 1946	67·6%	89·7%	81·3%
Per cent. immunised at 31st December, 1947	74·8%	90·9%	84·6%
Per cent. increase	7·2%	1·2%	3·3%

Immunisation of Children 0-5 Years.

From the figures shown above it will be noted that the number of immunised children in the 0-5 age group has risen by 119 over the number immunised during 1946. This is a creditable achievement as in 1946 an intensive campaign involving curtailment of the normal duties of the Health Visitors for some 10 weeks was necessary to raise the figure to the level reached at the end of that year. The dangerous " slump " which follows many a campaign was averted as the figure of 4,264 was obtained by the extra effort put into the day-to-day routine activities of the Department.

Whenever possible, the first immunisation injection is being given at five months of age and the majority of Salford babies complete the full course of injections before they are nine months old, although a few parents still prefer to wait until their children are 12 months old. Out of a total of approximately 2,000 babies born in Salford between January and June, 1947, 1,365 had completed a full immunisation course by 31st December, 1947.

Under the present scheme, which was brought into operation at the end of 1945, all babies, born in the city, are invited for Diphtheria immunisation as soon as they attain the age of five months. This ensures that all parents are informed of the immunisation facilities. If no response to the invitations is received, Health Visitors or Clinic Nurses follow up each individual case. As a result of constant " following up," 74·8 per cent. of children under five years have now been immunised. This percentage is considerably higher than was obtained before this system was introduced. Of the remaining 25·2 per cent., 13 per cent. are babies under six months of age and are therefore not old enough to have completed a full course of immunisation, so only 12·2 per cent. have either definitely refused immunisation or postponed it on account of illness.

Of the 5,272 children immunised during the year, 154 were immunised by General Practitioners, 37 in hospital, 18 in Day Nurseries, 2,000 in their homes, 2,055 in Child Welfare Centres and 1,008 in schools and school clinics.

Immunisation of School Children 5-15 Years.

It is unfortunate that the number of children immunised during the year in the 5-15 age group has fallen by 703 on the figure of the previous year. At the same time it must be realised that there are few children in the schools who have not been immunised in infancy and as the percentage of immunised school children has reached 90·9 per cent. there are few children left to be immunised apart from the ones whose parents have always definitely refused immunisation. Attempts are being constantly made to persuade the latter that it is better to have their children protected against such a dreadful disease.

Special efforts have been made since September to see that all children are protected either before, or on entry into school at five years. Arrangements have been made with the Education Authority to supply names of all new entrants into schools. Diphtheria immunisation records are then checked and the parents of all children immunised in infancy are advised to allow them to have a " reinforcing " injection. During the year 283 " reinforcing " injections were given to school children.

Severe reactions to immunisation have been few, not more than five during the year, and these quickly responded to treatment.

From the number of notifications of, and deaths from, Diphtheria it will be seen that the benefit of many years of uphill work is now being felt for there was not a single death from Diphtheria during the whole year and only 23 cases were notified. These figures compare favourably with the ones of 10 years ago (1937) when 12 deaths occurred and 364 cases were notified. Of the 23 cases notified during 1947, 12 were over 14 years of age and were notified from a clothing factory. Of these, seven had not been immunised and five had been immunised many years previously and had not received a " reinforcing " injection. The remaining 11 cases were children under 14 years of age, of which only one had been immunised in infancy.

In addition to Diphtheria Immunisation, 528 children under five years were immunised against Whooping Cough.

HOPE HOSPITAL.

Report of the Medical Superintendent for the year 1947.

General.

In spite of many difficulties, which have continued to limit and hamper its effectiveness throughout the year, the hospital has once again managed to achieve a full and satisfying year's work. The main difficulties are represented by deficient accommodation and shortage of nursing staff. In previous reports, attention has been focused on both these factors and still, it is with profound regret and sorrow that I have to point out in yet another annual report, the complete lack of any relief whatsoever in facing these two great problems. In fact, the situation has deteriorated in both respects, and there is no doubt that the hospital, in discharging its duties, is now being forced into a situation where it cannot shoulder these additional burdens and still continue to meet its obligations completely, honestly and adequately. Unavoidably, the chief pressure of its difficulties falls on the chronic and subacute wards, where the patients have to be content with a service, which, while it is the best that can be provided under the circumstances, falls short of what is considered desirable, and even necessary for the chronic and aged patient in these more enlightened days.

It is not difficult to understand why our two main problems remain so painfully persistent. Shortage of accommodation is due to the fact that there has been no progress in the schemes for replacing the buildings destroyed by enemy action. The insistence on the evacuation by the hospital of the space still being used in the Old People's Homes has exacerbated the situation, and as the position is at present constituted, this will inevitably mean a considerable reduction in beds, unless alternative accommodation is forthcoming. Fewer beds will involve a further limitation of the number of patients admitted to the hospital and it would appear that the chief incidence of this restriction must fall on the chronic aged patients. Already the acceptance of these patients has to be deferred in many instances, or even refused, and a greater intensification of the screening of such patients before admission cannot be regarded with equanimity. Moreover, pressure on the relatives is being increased in order to promote the earlier discharge of chronic patients to their own homes wherever possible. Unfortunately domestic difficulties, especially lack of room in the homes, or inadequate help, may compel the retention in the hospital of a patient who might otherwise be dealt with fairly and reasonably at home.

Such chronic accommodation as is available has been only maintained in full use in spite of our other great difficulty, nursing staff shortage. The core of this problem is sheer lack of numbers—we do not have sufficient student nurses to maintain our nursing establishment. The full effects of the shortage have been partly masked by the use of part-time trained nurses, the acceptance of male student nurses and a wider application of the employment of male and female ward orderlies. The Working Party Report on the Recruitment and Training of Nurses has dealt with this matter exhaustively and it is to be hoped that the discussions now taking place at a high level will provide some amelioration of the situation by increasing the nursing labour force and also spreading it, so that what is available can be shared equitably by all units requiring nurses. It would be a statesmanlike and generous gesture on the part of the famous and honoured nurse-training schools, whose requirements in trained and student nurses are adequately met, to encourage some of their applicants to go elsewhere, and, in particular, to scrutinise their establishment of trained nurses critically and impartially in order to determine whether any could be spared for work elsewhere and thus ensure a fairer spread-over of the available resources. For example, many peripheral training schools are finding it impossible to meet their requirements in certificated sister tutors, because so many of these are being concentrated in certain hospitals. It is time that the leading training schools took a more responsible view of their obligations to their less fortunate neighbours. It is very natural and right that young, ambitious women should be anxious to hold a position in these famous schools, not only to enrich and widen their experience, but also because of the value which such a recommendation can have in leading to other and more important posts, but a dispersal of the available trained young sister tutors would have a bountiful effect throughout the nursing world and exert incalculable benefit on nurse-training in general. This principle could be applied in other directions and student nurses could be spread over short-staffed hospitals where they could commence their training without delay instead of having to wait often for quite long periods.

In the meantime a great deal has to be done in our Nurses' Home in order to make even a moderately favourable comparison with many other hospitals. Only the tragic shortage of nurses keeps the Nurses' Home from overcrowding, yet no progress has been made in making available the houses which were to have been purchased for an outlet overflow. This congestion, coupled with lack of heating, and in many cases unsatisfactory furniture, furnishings, and amenities, must create a most unfavourable impression on many intending candidates and makes even more difficult the task of finding and keeping the new nursing entrants. These matters have been ventilated time and again, but the crisis of nursing staff shortage demands that a great effort be made now to improve the conditions and amenities in the Nurses' Home.

Domestic staff shortages have been less acute and painful than during the war years, but they still exist and exert their harmful effects on the picture. Efforts have been made to explore the possibilities of male labour for domestic purposes and a beginning in the Nurses' Home by the replacement of some of the dining room maids with male waiters has been an undoubted and encouraging success. But how far, in the present economic situation, male labour will continue to be available, remains to be seen.

The fuel crisis early in the year had a most adverse effect. In addition to the stringent fuel economy which became necessary, for a short time there was a most acute and alarming shortage of dressings and also increased difficulty in the supply of certain drugs. This phase did not last long, but the suspension of capital building schemes blocked completely any hopes which had been entertained regarding the provision of new accommodation. Plans and negotiations were continued during the year, but the only real and effective factor in this picture was the increased and determined pressure from the Civic Welfare Committee that the Old People's Homes should be completely evacuated as soon as possible. Nevertheless there was some room for hope that the following year would see real progress, and the results of our discussions with the officials of the Ministry of Health encouraged the belief that the urgency of our situation was appreciated.

In April, the hospital was visited by Mrs. Needham, Catering Advisor to the Ministry of Health. The catering arrangements were intensively surveyed and approval was expressed of the progress made since the appointment of Miss Clucas, as Food Supervisor. The more severe staffing difficulties have been alleviated but the main stumbling block to further progress is the delay in the supply of equipment. Plans have been drawn up, and approved by the Committee, for improving the hospital kitchen layout and for providing some increased accommodation, as well as for additional equipment, in particular, heated delivery trolleys. We must now wait patiently till these improvements can be effected, but in the meantime, every possible attempt is being made to introduce changes which can bring benefits. A closer liaison by means of a series of catering conferences has been established with the medical, nursing, and steward's departments, and it is gratifying to record that advances are being made, though all difficulties are not yet solved.

Emergency Medical Service.

During the year there has been progressively further diminution of the work in connection with the Emergency Medical Service. In June, the bed reserve was reduced to 15, and throughout the year there were only casual admissions of service patients, with a more steady flow of merchant navy and Ministry of Pensions cases. Ninety-eight patients were admitted as E.M.S. patients compared with 222 in the previous year.

Emergency Medical Service admissions :—

Service patients	24
Civilians, Merchant Navy and Ministry of Pensions	74
	98

Medical Staff.

There were no changes in the establishment of the resident, full-time or visiting medical staff during the year, other than the joint appointment with Salford Royal Hospital of an accident officer to deal especially with fracture and injury cases, and to help establish a closer liaison between the two hospitals for accident cases. Mr. Brun commenced duty on the 1st July as accident officer.

Mr. Milner was succeeded by Mr. Sayle Creer as visiting orthopædic surgeon on the 31st October. Dr. Nash resigned from the post of visiting anæsthetist and Dr. Sneddon undertook an additional weekly session in her stead.

Dr. Roworth ceased as obstetrician and gynæcologist on the 6th February and was followed by Dr. Nichol who held the post for eight months and was then succeeded by Dr. Rawlings on the 14th October. Mr. Grimshaw was called up for national service and left to join the Army on the 16th February. His post as surgeon was filled by Mr. Bullough. Dr. Hayes terminated as assistant resident surgical officer on the 24th October and was followed by Mr. Stock. There were numerous changes in the assistant medical officers during the year ; nine ceased duty and eight commenced.

Ceased duty—

Dr. Kearney	16th January.
Dr. Finlay	7th April.
Dr. Wyile	15th April.
Dr. Morford	19th April.
Dr. Coulsting	30th June.
Dr. Hindley	10th October.
Dr. Cross	31st October.
Dr. Townsend	31st October.
Dr. Fleming	30th November.

Commenced duty—

Dr. Coulsting	17th January.
Dr. Cross	1st May.
Dr. Townsend	1st May.
Dr. Fleming	1st June.
Dr. Lunt	22nd July.
Dr. Crichton	24th October.
Dr. Pearson	14th November.
Dr. Williams	14th November.

Eight people acted as locum medical officers on nine occasions for a total of 214 days, and two senior medical students were employed as locums for nine days. Supernumerary trainees under the government training scheme for demobilised medical officers were attached to the hospital as follows :—

	Commenced.	*Ceased.*	*Total employed.*
Senior Registrars—			
Medical	1	1	4
Surgical	1	–	1
Obstetrical	1	1	2
Anæsthetics	1	1	1
Junior House Officers—			
General	–	4	4
Obstetrical	2	2	2
Pædiatric	1	–	1

In addition, three medical students were attached to the hospital for clinical instruction and experience and a number of students attended the various out-patient clinics and ward rounds throughout the year. It should be noted that in spite of the additional anæsthetic sessions by the visiting anæsthetists and the assistance of the supernumerary anæsthetic registrars, for part of the year, the assistant medical officers were responsible for the administration of 1,598 anæsthetics, half of the total for the theatre operations. It is considered that this duty still demands too much of the time of the junior medical staff.

The Staff Medical Society continued to have regular meetings throughout the year under the chairmanship of Mr. Heslop with Mr. Pollitt as Secretary. The Annual Clinical Meeting was held in October and was attended by 50 medical practitioners. The Medical Staff Committee, consisting of senior medical and dental staffs, met throughout the year with Dr. Crawford as Chairman, and Dr. Mackay as Secretary.

In October, the Royal College of Surgeons, England, recognised the work of the assistant resident surgical officer and of the general surgical and orthopædic assistant medical officer's posts, as qualifying for the Final Fellowship Examination.

Staff Clinic.

Attendances at the daily staff clinic on ward H.3 have continued at a high level and have totalled 1,996, of which 1,535 were members of the nursing staff and 461 other staff.

The main conditions for which advice was sought were :—

	Attendances.
Anæmia	61
Colds	198
Debility	161
Ear, Nose and Throat	81
Eyes	55
Foot troubles	25
Gastro-enteritis	54
Injuries	228
Immunisation, vaccination, &c.	138
Mantoux tests	104
Medical examinations	110
Menstrual disorders	7
Rheumatism	25
Septic conditions	228
Skins	133
Teeth	36
Tonsillitis	113
Varicose veins	41
Miscellaneous	198
	1,996

The total days lost through sickness of nursing staff amounted to 3,578 days, compared with 3,756 in 1946 and 3,545 days in 1945. Tuberculosis accounted for 1,095 days, equivalent to three people off continuously throughout the year. New nursing entrants are Mantoux tested as part of their initial medical examination and where they are negative are followed up until they become positive. X-ray chest examinations are routine on all nurses at their commencement of duty and annually thereafter. Last year, attention was drawn to the anxiety caused by this problem of tuberculosis and it was pointed out that the need for improvements in the Nurses' Home was thereby made more urgent. I would like to emphasise this point once again, in association with my observations regarding the difficulty in finding new nursing entrants. Influenza and colds accounted for the loss of 698 days. The main causes of days lost were as follows :—

	Days Lost.
Anæmia	36
Appendicectomy	180
Colds and influenza	698
Debility	218
Eyes	26
Gastric conditions	13
Gastro-enteritis	62
Hæmorrhoidectomy	33
Infectious diseases	177
Injuries	41
Jaundice	12
Menstrual disorders	36
Orthopædic conditions	55
Pneumonia	60
Pulmonary tuberculosis	1,095
Renal diseases	149
Rheumatism	124
Septic conditions	134
Skins	66
Tonsillectomy	58
Varicose veins	79
Miscellaneous	40
	3,578

Infection.

The number of infectious diseases occurring in the hospital shows an appreciable decrease, in spite of a sharp rise in the number of cases of measles. There was a reduction in the incidence of chickenpox and diphtheria, as well as a sharp diminution in the number of cases of dysentery and epidemic diarrhœa. Fifty-three cases of infectious disease were transferred to Ladywell Hospital :—

Chickenpox	2
Diphtheria	7
German measles	1
Measles	24
Mumps	1
Poliomyelitis	4
Whooping cough	13
Dysentery	1
	53

Sixteen cases of tuberculosis were transferred to Ladywell Hospital, and nine to Nab Top Sanatorium.

TABLE OF WARD INFECTIONS.

	Total Cases.	Ward B.3.	Ward F.3.	Ward G.3.	Ward H.2.	Other Wards.	Nursing Staff.
Chickenpox	18	–	1	7	7	–	3
Diphtheria	7	–	2	1	2	1	1
Dysentery	–	–	–	–	–	–	–
Enteric Fever	–	–	–	–	–	–	–
German Measles	1	–	–	–	–	1	–
Measles	32	1	6	2	19	1	3
Mumps	3	–	–	–	–	1	2
Poliomyelitis	4	–	1	3	–	–	–
Whooping Cough	14	5	2	1	6	–	–
TOTALS	79	6	12	14	34	4	9
Epidemic Diarrhœa	10	–	–	–	–	10	–

Transfers.

Three hundred and thirteen patients were admitted from other institutions and 218 were transferred to other institutions.

Admitted from other Institutions—

Salford Royal Hospital	118
Pendlebury Children's Hospital	49
Ladywell Hospital	46
Nab Top Sanatorium	3
Manchester Northern Hospital	3
Mental Institutions	6
E.M.S. Hospitals	3
Park Hospital, Davyhulme	4
Old People's Homes	62
Miscellaneous	19
	313

Transferred to other Institutions—

Ladywell Hospital	69
(Infectious diseases 53, Tuberculosis 16)	
Nab Top Sanatorium	9
Pendlebury Children's Hospital	2
Rose Hill Orthopædic Hospital	2
Christie Hospital	8
Manchester Royal Infirmary	6
Salford Royal Hospital	2
Eye Hospital	6
E.M.S. Hospitals	3
Mental Hospitals and Institutions	28
Langho Epileptic Colony	2
Old People's Homes	78
Miscellaneous	3
	218

Tonsils and Adenoids.

It is felt necessary to draw attention to the large waiting list of patients awaiting operation for ear, nose and throat conditions. At the end of the year the total list consisted of 1,042 persons made up of :

Tonsils and adenoids—	
Girls	511
Boys	464
Adult E.N.T. cases	65
	1,040

The situation, already serious for some time, became aggravated by the necessity in August to suspend tonsil and adenoid operations on young people in view of the outbreak of poliomyelitis. Nevertheless, the total number of tonsil operations performed during the year amounted to almost the same as for the previous year, in spite of the cessation of these operations on children for over one-third of the year. Although large numbers of such operations were undertaken, the waiting list continues to grow, and the waiting period for these cases gets longer and longer. Part of the difficulty is due to the fact that many cases do not turn up for operation when they are ultimately sent for and there is thus an empty bed and a vacancy on the list. If these lost opportunities were fully taken up by cases willing to come in, the number of patients on the list would be much reduced. A disturbing feature of the situation is that the condition of some of the patients awaiting operation may become worse as a result of the delay. A state of affairs where patients, having been examined and certified as requiring operative treatment, must suffer a delay of over one year before receiving this necessary treatment, is both unsatisfactory and alarming.

The matter has been discussed with concern elsewhere, but as far as this hospital is concerned, nothing has been achieved and the position has deteriorated considerably during the year.

A study of the figures relating to work done and of the detailed reports of the various departments shows that, while there has been a reduction in the volume of work in certain directions, new high records were achieved in the maternity and the out-patient department as well as in the X-ray and pathological departments. Advances in treatment, both medical and surgical, have undoubtedly shortened the duration of in-patient stay of the average patients, and a great deal of preliminary investigation has often been undertaken in the out-patient department before the person is admitted to the hospital. A flourishing and active out-patient unit is a most healthy and promising sign and there has certainly been no decline in this field of activity. It is disappointing to note that for reasons of economy it was not found possible to proceed with a scheme which had been drawn up for an appointments system for out-patients. Long delays in the out-patient department, inadequate accommodation in temporary quarters, and shortage of clerical assistance have all combined to make more harassing and difficult the work of the staff and it is a pleasure to record that so much has been accomplished effectively and cheerfully.

The hospital is now at a standstill as far as progress and development are concerned. Much remains yet to be done in the way of strengthening and consolidating the gains of the recent past years, but no material advantage will eventuate in the future unless an attack is made on our twin enemies—accommodation and nursing staff shortages. New building must be done to overcome one, and a national plan for the economic utilisation of all available nursing resources is required for the other.

The staff in general has discharged its duties effectively and well, and the morale has continued at a high level. The hospital is now approaching yet another cross-road in its chequered history, but, in the light of what has been accomplished in the past and the difficulties which have been overcome by virtue of the loyal and united efforts of the staff, it can do so confidently, secure in the knowledge that it possesses the means, the ability and the determination to do all that will be required of it in the future.

It is with regret that we approach the severance, in the near future, of our close ties with the Medical Officer of Health and the Health Department. We shall miss the constant support, assistance and co-operation which we have been privileged to receive from them in the past and in expressing our thanks and gratitude, we may be also permitted to hope that the close association and co-operation, which have been built up in the past, will not be denied to us in the future. For without it, we shall not be able to achieve the best of which the hospital is capable in taking its proper place in the health service of the community.

Medical Department.

Staff—Dr. W. Mackay, Physician.
Dr. J. S. Parkinson, Visiting Physician.
Miss N. C. Rogers, Visiting Electrocardiographer.
Assistant Medical Officers allocated to medical wards.

Dr. Mackay reports as follows :—

General Work.—The number of patients requiring investigation and treatment continued to be large, and the wards were unusually full, indeed, during busy periods, accommodation had to be found for patients in other wards. Forty-seven cases of acute primary pneumonia were admitted during the year, and two cases of meningococcal meningitis were treated in the hospital. Six cases of tuberculous meningitis were admitted to hospital during the year, and one case of malaria was diagnosed and treated.

The electrocardiograph as an aid to diagnosis in the investigation of cardiac muscle function continued to be of great help. Reports on 758 electrocardiographic tracings were made during the year.

Pulmonary Tuberculosis.—The total number of new cases diagnosed during the year was 17. Another 18 known cases of pulmonary tuberculosis were admitted to hospital. All these patients were brought to the notice of the Senior Tuberculosis Officer at his weekly visits, and arrangements made to enable him to take them directly under his care. Certain pulmonary cases attending the Municipal Chest Clinic were admitted to hospital as occasion arose for special forms of investigation and treatment.

Out-patient Department—General Medical Clinic.—The work in this Clinic continued to increase. New patients numbering 1,104 were sent by their private medical attendants for help in diagnosis, for investigation, or for specialised treatment. There were 1,668 return attendances by old patients.

The Diabetic Clinic was attended by an average of 96 patients per month. The total number of attendances during the year was 1,157. New cases numbered 20.

The Special Investigation Clinic.—This clinic was attended by 92 children. Each child presented some medical problem. All were examined and investigated, and reports with recommendations, sent to the School Medical Officer or the Maternity and Child Welfare Officer concerned.

Medical Out-patients—	1945.	1946.	1947.	1947.	
				Dr. Mackay.	*Dr. Parkinson.*
New patients	970	1,026	1,104	473	631
Old patients	1,254	1,447	1,668	788	880
Diabetic Clinic	1,056	1,171	1,157	1,157	
Special investigation clinic..............	77	88	252	252	
Spastic clinic			208		208
	3,357	3,732	4,389*		

* Including 1,440 new cases,

Surgical Department.

General—Mr. Brown, Surgeon.
Mr. Heslop, Visiting Surgeon.
Mr. Grimshaw (to February), Surgeon.
Mr. Bullough (from February), Surgeon.
Orthopædic—Mr. Milner, Visiting Surgeon (to October).
Mr. Sayle Creer, Visiting Surgeon (from November).
Mr. Brun, Accident Officer.
Ear, Nose and Throat—Mr. McKelvie, Visiting Surgeon.
Assistant Resident Surgical Officer—Dr. Hayes (to October).
Assistant Resident Surgical Officer—Mr. Stock (from November).

Mr. Bullough reports as follows :—

The number and types of cases admitted to the acute surgical wards, and operations performed, have been substantially the same as in 1946. Apart from the lack of a separate ward for infected female surgical cases, accommodation has proved to be just adequate for needs.

There has been a great extension of the use of local anæsthesia for major operations, with consequent increased safety. Early ambulation after operation has been the established practice, and the combination of local anæsthesia and getting the patients up the day after operation, has reduced markedly the incidence of post-operative chest complications.

The non-operative method of treatment of suitable cases of perforated peptic ulcer has been extended, until it is now almost the rule, and its success is reflected in the fact that there has, so far, been no mortality.

Continuous gastric suction for operations on the intestinal tract has been made the routine, and has led to increased comfort and a lower morbidity rate.

The operations were as follows :—

(Full-time staff)—

Medical Superintendent—Mr. Brown	213
Full-time Surgeon—Mr. Grimshaw	49
Full-time Surgeon—Mr. Bullough	218
Obstetrician and Gynæcologist—Dr. Roworth	32
Obstetrician and Gynæcologist—Dr. Nichol	158
Obstetrician and Gynæcologist—Dr. Rawlings	65
Assistant R.O.O.—Dr. Donovan	236
Assistant Medical Officers	1,032
	2,003

(Visiting staff)—

Mr. Heslop, General Surgeon	51
Mr. Milner, Orthopædic Surgeon	76
Mr. Sayle Creer, Orthopædic Surgeon	10
Dr. Rickards, Gynæcologist	132
Mr. McKelvie, Aural Surgeon	738
Dr. Janus, Eye Surgeon	51
Mr. Pollitt, Dental Surgeon	94
Mr. Brun, Accident Officer	38
Other Visiting Surgeons	7
	1,197

The anæsthetics were as follows :—

	1945.	1946.	1947.
General (chloroform, ether, gas and oxygen)	1,464	1,208	1,145
Spinal	1,098	1,125	750
Intravenous anæsthesia	746	930	680
Local	578	410	540
Other (twilight, avertin)	60	237	85
	3,946	3,910	3,200

The anæsthetics were distributed as follows :—

Dr. Ghosh	177
Dr. Nash	213
Dr. Kupfermann	136
Dr. Sneddon	171
Dr. Harris (supernumerary)	452
Dr. Swerdlow (supernumerary)	77
Surgeons	371
Assistant Medical Officers	1,603
	3,200

Total number of operations performed 3,200

Head and Neck.	1. Lips, face, mouth and jaws	15
	2. Tongue and salivary glands	3
	3. Skull and scalp	1
	4. Intracranial operations	7
	5. Prefontal leucotomy	4
	6. Tuberculous glands, neck	14
	7. Neck—other conditions	12
	8. Thyroid	19

Ear, Nose and Throat.	9.	Tonsils and adenoids (guillotine)	506
	10.	Tonsil dissection	20
	11.	Diathermy of tonsils	14
	12.	Nose and paranasal sinuses	98
	13.	Mastoid	11
	14.	External ear, paracentesis, etc.	25
	15.	Fauces, pharynx and larynx	1
	16.	Bronchoscopy and œsophagoscopy	16
Eyes.	17.	Minor eye, tarsal cysts, lachrymal probings, etc.	20
	18.	Strabismus operations	39
Teeth.	19.	Teeth	94
Stomach and Duodenum.	20.	Partial gastrectomy	36
	21.	Gastroenterostomy	11
	22.	Gastrostomy	3
	23.	Rammstedt's operation for pyloric stenosis	5
	24.	Toilet and suture of perforations	6
	25.	Ligation, etc.	11
	26.	Gastroscopy	21
Small Intestine.	27.	Small intestine other than duct herniæ	1
	28.	Intussusception	5
Colon, Rectum and Anus.	29.	Colostomy and cæcostomy	29
	30.	Resection and ileo-transverse colostomy	12
	31.	Abdomino-perineal and perineal excision of rectum	2
	32.	Prolapse, hæmorrhoids, fissure, sigmoidoscopy	130
	33.	Abscesses, ischio-rectal and perianal fistulæ	38
	34.	Closure of colostomy, etc.	28
	35.	Sacrococcygeal cyst	1
Appendix.	36.	Acute appendices	132
	37.	Interval appendices	60
Laparotomy.	38.	Laparotomy (exploration only)	28
Gall-bladder.	39.	Cholecystectomy, cholecystostomy and choledochostomy	44
	40.	Cholecystgastroenterostomy	—
Pancreas.	41.	Pancreas	—
Spleen.	42.	Splenectomy	—
Liver.	43.	Liver	—
Peritoneum and Mesentery.	44.	Peritonitis, tuberculous peritonitis, cysts, etc.	2
	45.	Subphrenic abscesses	2
	46.	Appendix abscess	8
Herniae.	47.	Inguinal herniæ	116
	48.	Femoral herniæ	38
	49.	Umbilical herniæ	28
	50.	Ventral, incisional	8
	51.	Other herniæ	5

Blood Vessels.	52. Embolectomy	—
	53. Varicose veins	28
	54. Ligation of patent ductus	—
Kidney, Ureter.	55. Nephrectomy	9
	56. Nephro-uretero-lithotomy	2
	57. Nephro-uretero-stomy	2
	58. Perinephric abscess	6
	59. Transplantation of ureters	—
	60. Other operations on kidney and ureter	1
Bladder.	61. Supra-pubic cystotomy	25
	62. Cystoscopy (including diathermy)	66
	63. Other supra-pubic operations (lithotomy, etc.)	2
Prostate.	64. Supra-pubic prostatectomy	5
	65. Other prostate operations	—
Penis and Scrotum.	66. Bougies	33
	67. Circumcision	125
	68. Amputation of penis	1
	69. Other operations on urethra, penis and scrotum	9
Testes.	70. Orchidopexy	5
	71. Hydrocele and varicocele	3
	72. Orchidectomy—epididymectomy	1
Gynaecological.	73. Vulval neoplasms	2
	74. Plastic repair operations (colporrhaphy, perineorrhaphy, etc.)	80
	75. Abdominal hysterectomy	60
	76. Hysterotomy	3
	77. Myomectomy	3
	78. Vaginal hysterectomy	—
	79. Cæsarian section	43
	80. Dilatation and curettage	384
	81. Ventrifixation	6
	82. Salpingectomy and ectopics	12
	83. Ovariotomy and oophorectomy	20
	84. Tubo-ovarian abscess	6
	85. Minor gynæcological operations	107
	86. Forceps delivery, application of scalp traction	—
Orthopaedic.	87. Laminectomy (prolapsed disc, tumour of cord)	—
	88. Vertebral column (spine grafts, etc.)	8
	89. Amputation, arms	1
	90. Amputation, legs	8
	91. Amputation, digits	7
	92. Fractures and dislocations, manipulations	30
	93. Open reduction of fractures	2
	94. Plastic bone operation. Hallux valgus, hammer toe, etc.	24

Orthopaedic (continued).	95. Acute and chronic osteomyelitis, sequestrectomy	5
	96. Lumbar and other sympathectomies	2
	97. Cartilages	23
	98. Tendon and nerves, muscles	24
	99. Torticollis	2
	100. Insertion and extraction of S.P. pins	6
	101. Gunshot wounds and foreign bodies	3
	102. Manipulation and plaster	4
	103. Arthrodesis of hips, knees, etc	—
Skin.	104. Abscesses	52
	105. Plastic	2
	106. Cysts, ganglions, warts	65
	107. Removal of nails and nail beds	10
Breast.	108. Radical mastectomy	12
	109. Simple amputation and biopsy	22
	110. Breast abscesses	28
Chest.	111. Empyema drainage	22
	112. Phrenic evulsions	1
Miscellaneous.	113. Block dissection of glands (neck and groin)	1
	114. Burst abdomen, evacuation of hæmatoma	3
	115. Reinsertion of tubes	9
	116. Aspirations	19
	117. Opening of colostomy	—
	118. Dressings	23
	119. Burns and scalds	18
	120. Toilet and suture of lacerations	8
		3,200

Orthopaedic Department.

Staff—Mr. S. M. Milner (to October), Visiting Surgeon.
Mr. Sayle Creer (from November), Visiting Surgeon.
Mr. C. Brun (Accident Officer).

In-patients—	1945.	1946.	1947.
New admissions	384	286	312
Discharges	370	256	303
Deaths	15	6	7
Out-patients—			
Attendances	1,622	1,545	1,517
Patients treated in plaster room	2,114	1,978	1,993
Anæsthetics administered in plaster room	136	125	109
Fracture Clinic			270

Ear, Nose and Throat Department.

Staff—Mr. W. B. McKelvie, E.N.T. Surgeon.

Mr. McKelvie reports as follows :—

Work in the Ear, Nose and Throat Department proceeded satisfactorily during the year.

It appears to be the case that penicillin and "sulpha" therapy controls the complications of chronic middle ear deafness, such as lateral sinus thrombosis and otitic meningitis, but we continue to see brain abscesses. The control of the meiningitis and the use of penicillin via the drainage tube (when this is indicated) in the brain, has made the care of these very serious troubles somewhat easier.

	1945.	1946.	1947.
Ward patients	50	898	135
New patients	602		578
Old patients	1,124	248	284
	1,776	1,146	997

Obstetrical and Gynaecological Department.

Obstetrician and Gynæcologist, Dr. Rawlings.
Visiting Obstetrician and Gynæcologist, Dr. Rickards.
Assistant Resident Obstetrical Officer, Dr. Donovan.
Assistant Resident Obstetrical Officer, Dr. Ridehalgh.

Dr. Rawlings reports as follows :—

1. *General.*—During the twelve months ending December 31st, 1947, 1,675 women have been admitted to the department. The comparable figure for 1946 (a record year) was 1,629.

In the last quarter of the year the department has suffered from an acute exacerbation of the chronic complaint of shortage of staff. The number of pupil midwives at the beginning of 1948 stands at only half the number available one year previously and is only one-third of our normal number. In consequence, the large volume of work has strained to the utmost the resources of the department.

The maternity supervisor, the sisters, trained staff and pupils are to be congratulated upon the smoothness and efficiency with which the work has been carried out. The assistance rendered by part-time midwives and ward orderlies has been invaluable.

However, unless there is a radical improvement in the next few months, the situation must inevitably become impossible. The staff cannot be expected to continue to work efficiently at this pace and further depletions in staff will occur during the holiday season. In addition, to meet this situation, wards have had to be temporarily closed. This results in chronic overcrowding of the available wards and mothers have had to be discharged as early as the sixth and seventh days of the puerperium. It is impossible under these circumstances to maintain the high standards requisite in an efficient maternity service, and outbreaks of infection in both mothers and babies must be anticipated.

We have been forced to restrict admissions to those Salford residents whose home conditions are unsuitable for the confinement—and as the housing problem is a very serious one it is often difficult to make a distinction.

2. *Medical Staff.*—Dr. Roworth was succeeded by Dr. R. W. Nichol on 1st March, 1947. Dr. Rawlings took over from Dr. Nichol in October, 1947. Drs. Donovan and Ridehalgh have remained to render sterling service and we have been fortunate in having during the year, one or two ex-service doctors for training in midwifery, who have also given valuable assistance in the department.

3. *Detailed work of the department.*—A statistical record is set out below.

Women admitted and delivered	1,645
Children delivered (including 24 sets of twins, one set of quads, plus 16 babies born before admission but whose births were notified by the hospital)	1,688
Women booked at the ante-natal clinic—	
Salford	1,519
County	4
Total	1,523
Unbooked (emergency cases)—	
Salford	146
County	6
Total	152
Total women admitted	1,675

Normal deliveries	1,419	84%
Cæsarian sections	41	2·5%
Forceps deliveries	134	8%
Breech deliveries	55	3%
Face presentations	9	0·5%
Born before admission	30	—
Manual removal of placenta	20	1·2%
Maternal deaths	6	(including 2 deaths after abortions. The two abortion deaths occurred in the "Abortion" ward but are included as maternal deaths).

Caesarean Sections.

Number	41
Maternal deaths	—
Stillbirths	3
Neonatal deaths	1

Indication.

Repeat Caesarean	10	
Disproportion	15	(Elective C.S. after trial labour)
Antepartum hæmorrhage	6	
Elderly primigravida with slight or major obstetrical complication	4	
Miscellaneous causes	6	

Maternal Deaths.

(1) Clinic case. Age 33 years. Mitral stenosis. Two previous miscarriages. First seen in the third month of her third pregnancy. Her condition deteriorated in spite of rest, etc. Died undelivered at the sixth month. Cause of death : Myocardial failure secondary to mitral stenosis.

(2) Clinic case. Age 28 years. Primigravida. Diabetes of five years standing. Low forceps delivery at term. Retained placents, post-partum hæmorrhage and manual removal. Died five hours after delivery.
Cause of death : " Shock " secondary to hæmorrhage. The diabetes was undoubtedly a contributing factor.

(3) Patient aged 27 years. Seen in the third month of her third pregnancy. Diagnosis : Acute exacerbation of a chronic nephritis. Abdominal hysterotomy performed under spinal anæsthesia. Died 22 days later in uræmia.

(4) Non-clinic case. Aged 31 years. Mitral stenosis. Emergency admission when 24 weeks pregnant. Aborted spontaneously two days later. Bleeding due to retained products of conception. D. and C. performed under Pentothal anæsthesia. Patient collapsed under the anæsthetic and did not respond to resuscitative measures.
Cause of death : Acute heart failure secondary to advanced mitral stenosis.

(5) Emergency admission. Aged 21 years. Primigravida. Baby born at home. Patient admitted with a postpartum hæmorrhage due to retained placents. Manual removal of placenta under general anæsthetic. Patient collapsed two hours after operation and died three hours later. Post-mortem showed no gross changes. The appearances were in keeping with " obstetric shock " secondary to postpartum hæmorrhage and manual removal of placenta.

(6) Non-clinic case. Aged 25 years. Admitted with a profound toxæmia following a septic abortion ten days before. Did not respond to penicillin, blood transfusions, etc., and died from general peritonitis and septicæmia.

Puerperal Pyrexia.

There were 41 patients who suffered from a "notifiable" degree of fever.

Causes.

1. Following a "viable" delivery	32
(*a*) Delivered in hospital	30
Causes—	
Uterine or presumed uterine infection	17
Pyelitis	7
White leg	1
Respiratory infection	2
Breast infection	2
Infective hepatitis	1
	30
(*b*) Admitted as puerperal fever	2
2. Following abortion	9
Total	41

Infant Statistics.

Stillbirths ... 74 ... 43·9/1,000 total births.

Causes.

Abnormal infants	15
Asphyxia (all causes)	38
Death in utero	17
Cerebral hæmorrhage	4
Total	74

Neo-natal deaths ... 56 ... 35/1,000 live births.

Of these 53 died in the first ten days. Thirty-two weighed less than 5½ lbs. at birth (16 of these weighed less than 3 lbs.).

Causes of Death.

Prematurity (with or without asphyxia but without other complications	22
Respiratory (asphyxia in full-term infant broncho-pneumonia, atelectasis)	12
"Rhesus" babies	2
Cerebral hæmorrhage	12
Congenital abnormalities	8

Breast Feeding Clinic.

This clinic has continued to supply an important link in the chain of infant welfare and has concluded an excellent year's work.

	1945.	1946.	1947.
Number of attendances	602	2,539	1,454
Number of mothers	131	276	284
Average attendance per mother...	4·5	9·2	5·1
Results :			
Fully breast fed babies	76 (58%)	164 (59·7%)	184 (64·8%)
Partially breast fed	50 (38·3%)	103 (37·2%)	94 (33·1%)
Artificially fed babies..........	5 (3·8%)	9 (3·1%)	6 (2·1%)

Abortion and Septic Midwifery.

(1) *Septic Midwifery* (G.2x).

One hundred and forty-five patients were transferred from the maternity ward. Less than half of these were cases of puerperal sepsis. Many were mothers of stillborn infants or late miscarriages which had taken place on the maternity department.

(2) *Abortions.*

The number of admissions has decreased due to the non-admission of county cases.

Total Admissions.	*Mothers.*	*Babies.*
From outside..	447	13
Transfers from maternity wards	145	51
Births..	—	2
	592	66

Reasons for Admission.	
Abortion and threatened abortion	290
Puerperal infections	71
Breast infections	6
Ante-natal cases	50
Normal puerperium (stillbirths, etc.).........................	59
Miscellaneous (includes overflow from gynæcological ward, medical cases, etc.)	116
	592

Gynaecological Department.

In spite of staff shortages, a large number of patients has been dealt with in N.W.3 ward and in the gynæcological department. Sister and her staff are to be congratulated on the smooth working of N.W.3 ward. The numbers are smaller than the previous year due to the non-admission of "county" cases.

The figures are as under :—

Admissions to N.W.3 ward	528
Operations performed	444
Abdominal Operations—	
(1) Hysterectomy	53
(2) Others	53
Major Vaginal Operations—	
(1) Vaginal hysterectomy	2
(2) Colporrhaphy, etc.	83
Minor gynæcological (all types)	253
Total	444

Deaths ... 6

Cause of Death—	*Age.*
(1) Pulmonary embolus	52
(2) Died under anæsthesia	64
(3) Abdominal carcinomatosis	63
(4) Abdominal carcionomatosis	62
(5) Peritonitis	71
(6) Infected broad ligament tumour	44

Maternity and Gynaecological Clinics.

(1) *Maternity*—	
New ante-natal patients	1,862
Other ante-natal attendances	16,369
Post-natal attendances	958
Total	19,189
Proportion of mothers attending the post-natal clinic	57%
(2) *Gynaecological Clinic*—	
New patients	921
Old patients	895
Total	1,816
Total Visits—	
Ante-natal	18,231
Post-natal	958
Gynæcological	1,816
Total	21,005
Total in 1946	18,385

Blood samples taken for W.R. and Rhesus factors......... 3,222

Laboratory.

Staff—City Pathologist, Dr. G. J. Crawford.
Assistant City Pathologist—Dr. E. Greenwood.
Bio-chemist—Mr. W. Portwood.
Eight technicians.
One laboratory attendant.

Dr. Crawford reports as follows :—

The appended table gives a list of the investigations carried out at the clinical pathology laboratory during 1947.

The number of specimens examined was 43,399. These have been evaluated in standard laboratory units giving a total of 139,131 units. An increase of approximately 30 per cent. on the previous year.

The table does not include Wassermanns, Kahns, and Widal agglutination tests on patients in Hope Hospital which are carried out at the City Bacteriological Laboratory, Regent Road, and shown in the report from there. It also does not include the 1,526 blood donors bled during the year at Hope Hospital for the blood bank under the Ministry of Health Regional Blood Transfusion Service.

No further steps have been taken with regard to finding more spacious accommodation for the laboratory staff who are working under cramped and unsatisfactory conditions at present. It is hoped that new premises will be provided as soon as possible after the National Health Service is established.

Bacteriological Examinations—	*Units.*
Swabs for K.L.B.	5,745
Swabs for hæmolytic streptococci	3,190
Urines	6,822
Cervical swabs	1,605
Eye swabs	1,040
Stools for organisms	2,502
Exudates	2,335
Sputa for tuberculosis	3,544
Smears for gonococci	724
Blood cultures	540
Anærobic cultures	85
Penicillin sensitivity tests	36
Coagulase tests	905
Streptococcal groupings	50
Smears for tuberculosis	354
Cultures for tuberculosis	60
Bio-chemistry—	
Blood sugars	8,596
Fractional test meals	11,448
Urea clearance	4,365

Bio-chemistry (*continued*)—	*Units*
Blood urea	2,370
,, cholesterol	375
,, proteins	936
,, chlorides	68
,, sulphonamides	32
,, calcium	175
,, spectroscopic examination	3
,, sodium	30
,, potassium	40
,, inorganic phosphate	36
,, uric acid	36
Van den Bergh	329
Acid phosphatase	275
Alkaline phosphatase	300
Hippuric acid excretion	40
Stools for occult blood	692
,, fat	210
Urine for ascorbic acid	252
,, lead content	—
,, general examination	4,068
,, diastase	20
,, bromides	—
,, for 17 ketosteroids	80
C.S.F. colloidal gold	1,038
Tryptophane reaction	45
Urine for bile pigments	94
Stools for bile pigments	236
Blood thiocyanate estimation	250
Blood pyruvic acid estimation	40
Serum flocculation tests	117

Haematology—	
Full blood counts	6,288
Reticulocyte counts	2,826
Red cell counts	921
White cell counts	4,635
Hæmoglobin estimations	1,995
Blood groupings	898
Compatibilities	1,420
Blood sedimentation rates	3,504
Films for parasites	72
Platelet counts	60
Coagulation time	93
Prothrombin index	304
Paul Bunnell reactions	85
Sternal punctures	255
Red cell fragility	25
Groupings for Rh factor	6,198

Pathology—	*Units*
Cerebro spinal fluid	4,764
Pleural fluids	675
Autopsies	4,980
Sections (histological)	7,826
Smears for trichomonas	610
Vaccines	30
Guinea pig inoculations	5,520
Sperm counts	155
Immunity tests	483
Steriliser efficiency tests	12
Penicillin preparations :	
(*a*) solutions	4,063
(*b*) cream	5,180
(*c*) powder	720
Miscellaneous	284
National Blood Transfusion Service—	
Blood groupings	1,200
Plasma withdrawn	1,020
Ladywell Sanatorium—total examinations	5,877
Total Units	139,131

Paediatric Department.

Staff—Visiting Pædiatrician, Dr. C. Chisholm.
Assistant medical officers attached to the children's wards.

Dr. Chisholm reports as follows :—

The pædiatric department supervises the care of all the infants born in the hospital and has medical care of all children in the hospital up to and including their thirteenth year.

Maternity Department.—The health and progress of the infants has been very satisfactory. During the year 1947 the nurseries were very free from infection which so easily occurs and spreads where young children have to be treated in communal groups.

The live births numbered 1,614, of which 168 were premature. Fifty-six babies died including 32 premature infants. In these are included every infant which breathes, however premature and for however short a time. Sixteen of them were under three pounds in weight at birth. The prematures are nurses in the common nurseries and the result attained under these circumstances reflects credit on the nursing staff. The freedom from infection in the infant wards is only obtained by constant watchfulness and care. Every effort is made to maintain breast feeding and most infants are breast fed or mainly breast fed till discharge. Unfortunately, the mother's milk supply often fails on the strain of returning to the home and the breast feeding clinic is very valuable in trying to help the mother to maintain the supply.

The new milk kitchen which has now been established will be invaluable for the preparation of food for the artificially fed babies when it is functioning.

General Children's Medical Wards.—The children's wards consist of one large, well-ventilated room with 24 beds for babies of nine months or under with only one small side ward for isolation.

The general shortage of nurses makes the special nursing of these young infants difficult, but this year there was not much pressure on the accommodation and the infants did fairly well.

Two wards for older children, one of 32 beds and one of 46 beds, were kept well filled. The infection rate was very low and was well-managed, little spread occurring in the wards where cases of infection were introduced. This shows good work in children's wards. It is to be noted that the incidence of rheumatism and chorea which practically disappeared during the war, is again rising. This is an interesting phenomenon and the explanation difficult to determine. For long-stay cases the teaching staff, which we now have, is doing good work for the children both physically and mentally. The almoner has given much help to the department by arranging for convalescent treatment for those who need further supervision after they leave hospital.

Skin and Venereal Diseases Department.

Staff—Dr. Gill, Visiting Dermatologist and Venereologist.

Dr. Gill reports as follows :—

Skin Out-patient Department.—The work of this clinic has continued throughout the year satisfactorily but there is still scope for considerable expansion.

Amongst other interesting features during the year has been the increase noted of cases of seborrhœic dermatitis often with overlying sepsis and often simulating perfectly cases of impetigo contagiosa. It has been noted that treatment with penicillin cream (lanette wax base) if continued after the sepsis has been cleared in two to three days, usually causes a deterioration in the condition of the skin and a spreading and exacerbation of the underlying seborrhœa. Hence the failure of apparently simple septic lesions to respond to penicillin locally after 10 to 14 days' treatment should indicate a revision of diagnosis.

An interesting innovation during the year has been the treatment of capillary nævi and hæmangiomata mainly on the face, with repeated applications of X-ray in the form of thorium X in varnish. Satisfactory results have been achieved with the six or seven cases so far treated and the cosmetic result is good. Plain warts on the face also respond in a remarkable way to this agent.

Cases of pruritus (due to urticaria, allergic eczema, senile pruritus, etc.) have been tried on the new anti-histamine group of drugs (e.g., Benadryl, Anthistan) but relief obtained, though useful, is purely temporary and dependent on continued administration of the drug.

Finally, an increasing number of cases have been seen of vesicular eczema (pompholyx) of the fingers and hands. In 80 per cent. of these cases no evidence of a concomitant mycotic infection of the feet has been found and they are in most cases true sensitization eczemas (i.e., housewives, for example, to bleach and soda products, nursing staff to dettol, antiseptics).

1947.

1.		*Skin out-patients.*
	New cases	130
	Old cases	510
	Ward patients	127
		767

2. *Venereal Diseases Wards.*

	E.2X Male Ward.	*E.1X Female Ward.*
Syphilis	111	57
Chancroid	3	—
Gonorrhœa	2	2
Non-Venereal	7	8
	123	67

Total 190

3. *Patient Days. Aggregate.*

	Male.	*Female.*
Syphilis	1,015	1,260
Chancroid	16	—
Gonorrhœa	4	88
Non-Venereal	146	41

Total 2,570

C.S.F. Examination.

Male ... 87. Female ... 28. Total ... 115.

Chiropody Department.

Mr. Charlesworth reports as follows :—

This is the first report of the chiropody department, which was only introduced into the hospital in 1947. Nevertheless, it can be said, truthfully, that much useful work has already been done. Among the old patients in particular there has been much enthusiastic praise of the comfort derived from chiropody treatment. It is generally accepted that nursing makes heavy demands upon the feet, and it is well known that members of the nursing profession figure prominently in the list of foot sufferers. Therefore, as a result of the introduction of a chiropody department into the hospital much benefit has been derived by the nursing staff from the treatment made available by this department. The deleterious effect of pain arising from foot troubles upon the general health of the individual is not generally appreciated. Many cases are on record in which functional disorders of the feet have reflected in general physical and mental debility. Many minor lesions and excrescences of the feet are secondary to more serious conditions, and skilled treatment of these minor abnormalities by the chiropodist frequently provides a useful contribution towards the general cure. With these factors in mind, there is every reason to hope that this new department, as its work expands, will play a very useful part in the general service of the hospital.

Attendances at the clinic—395.

Nursing Staff.

Miss K. Martin, Matron, reports as follows :—

The year ending December, 1947, has been full and eventful and I feel that progress has been made in the nursing school, in spite of staff shortages. The ward sisters have again had to cope with this difficulty. The number of entrants has diminished and so we have had an ill-balanced nursing staff, with a shortage of juniors. Needless to say, on a long-term vision, this means a shortage of seniors in two years' time. At the end of 1946, we instituted a system of ward orderlies to relieve the nurse of the pressure of work and some domestic duties, and this has succeeded very well. The ward and departmental sisters should be congratulated on their co-operation under what must have been trying and difficult circumstances for no matter how the nursing staff numbers decrease, the number of patients never lessens.

From October, 1946, to October, 1947 (the school year), 83 student nurses entered and 63 completed their training. Most of them elected to take staff nurses' duties for six months, either before or after taking Part I midwifery training, and I think that all appreciate this valuable post-graduate time spent in their training school before going on to other work. The three years' training is but the framework on which to build subsequent experience, and staff nurse's duties give that confidence and stability which is so necessary towards accepting the full responsibility as a State Registered Nurse.

Nineteen forty-seven marks the commencement of the Male Nurse Training School and we welcome it. It is my belief that the future holds plenty of scope for the qualified male nurse and there will be a wide range for his activities with the introduction of the National Health Service. Ten candidates have entered and are making good progress, but the lack of residential accommodation is a handicap, especially in obtaining a selection of the right type of candidate.

In May, 1947, we instituted a Central Preliminary Training School, in co-operation with Ladywell Hospital and Prestwich Mental Hospital, an arrangement which is proving very satisfactory. Our tutors show great practical interest in the teaching and welfare of the students and take all innovations with an air of equanimity. We have become almost international in our school for up to date we have had one candidate from the West Indies, two from British West Africa and one from India.

The examination results have been satisfactory. The state examinations have been held three times during the year. In all, 66 candidates entered for the State final examination and 55 were successful. For the preliminary examination 64 entered and 55 passed Parts I and II. The hospital final examinations were held in February, May and October. Sixty entered and 48 qualified for their Hospital Certificate. Dr. Langley, Mr. Hughes and Mrs. Bethel conducted the final examinations and Mr. Brown and Miss Culpan again conducted the preliminary examinations.

The midwifery school still flourishes, and as is seen by the obstetrician's report it shows no signs of a decreasing amount of work. The flow of pupils fluctuates considerably, but the department as a whole continues energetically and cheerfully. We are in common with every maternity hospital in the country in having too few beds and too few staff to meet the needs of the mothers of to-day. It is encouraging to note that more pupils have elected to take Part 2 training, whether here or at other hospitals, so we feel we have made some contribution to the midwifery services of the country. Some candidates have also chosen to take Queen's Nurse training as a result of the insight into the home conditions of the patients acquired in their district work.

During the year (October, 1946, to October, 1947) 66 pupils have entered for Part 1 of the C.M.B. examination and 57 have passed. Since December, 1946, 14 pupils have proceeded to the Royal District Nurses' Home for Part 2 training and have qualified as midwives. The gas and air analgesia course has been continued and 47 pupils have gained certificates of proficiency.

We have had another year of changes on the staff—but this time it has been amongst the ward sisters. This has been due to an epidemic of marriages, as no less than 10 of the trained staff have married. Some, I am pleased to say, are still with us. This number does not include student nurses of whom six have married and some are continuing their training.

In October, 1946, Miss E. Woodhouse left to take a senior administrative position at Liverpool and Miss E. Matthews joined the staff as second assistant matron in her place in March, 1947.

The Government launched a publicity campaign for part-time nurses early in the year and we were able to increase our staff with these. We had already accepted the idea in departments and clinics before the Government's scheme was introduced, and I found it worked satisfactorily. It has been a noticeable thing that the Government's recommended increased salary percentage on 30 hours per week or less encourages the limitation of work to 30 hours only. There is a definite place in hospital for the part-time nursing staff, for they prove valuable additions and play their part well in caring for the sick.

The social side continues to flourish. Dances are still the most popular form of entertainment, and the tennis and hockey teams are doing well. The tennis team reached the final of the Sparshott Cup matches this year and we were disappointed when our opponents, Manchester Royal Infirmary, won it. We gave them a good game and we have hopes for 1948. Play for the Webb Cup was also revived. A library service for the staff was instituted in May, with Miss Morrison as the Honorary Librarian. This privilege accorded to us by the Health Committee and the Libraries Committee is much appreciated.

I feel that the tone of my report stresses nursing staff shortage, and although the domestic situation has eased somewhat from previous years, it is naturally a matter of concern to us when we consider the future of the nursing of the patient. Obviously, more domestics relieve the nurse, but a regular flow of new candidates to the training school is essential to provide for the future. In spite of our difficulties in 1947 I feel that we can still face the future with a promise, that the services offered to the public will be of the same high standard as in previous years.

Secretary-Steward's Report.

Mr. C. A. A. Hankins, Secretary-Steward, reports as follows :—

During the year ended 31st December, 1947, the following work has been carried out :—

Hospital Wards.—Wards F.2 and F.3 have been plastered and redecorated. The electricity mains and supply points were thoroughly overhauled and rewired. Wards E.1 and E.2 were redecorated. The day room of B.1 ward was converted and equipped as a receiving unit and children's diet kitchen.

The fire alarm system was overhauled and repaired. The hot and cold water mains to ward E.1 were renewed.

Nurses' Home.—New fire hose reels were fixed at various points in the Home as recommended by the National Fire Service.

"A" and "B" blocks of the Home were rewired and electrical services overhauled.

Soil pipes in the Nurses' Home were renewed.

The Lecture Rooms, Main Dining Hall, " B " and " C " corridors and stairwells, and 154 bedrooms were redecorated.

The wire netting surround of the tennis courts was renewed and painted.

General.—The roofs of the hospital pavilions and Nurses' Home were thoroughly examined and repaired after war damage.

The main electrical supplies for the hospital were thoroughly examined and main switches and distribution boards renewed. The alternative supplies were also reintroduced after being destroyed through enemy action.

Concrete floors of basements under " E " pavilion were made good and the spaces repaired and are now used as dry goods and soap stores for the hospital.

The alteration of steam, water and gas mains in the hospital kitchen was carried out in preparation for the kitchen reconstruction scheme under consideration. Several items of cooking equipment were moved to new positions.

The air filtering plant of the laundry was completely overhauled.

The dispensary, and doctors' quarters on " B " pavilion were redecorated.

One of the air raid shelters on the Nurses' Home front was converted into a store for the Roman Catholic Chaplain and also for the gardeners.

Grounds.—The grounds have been kept as colourful as possible. The lawns and flower beds are gradually returning to better conditions after the war years, when work was limited on them. New rose beds have been established at the west end of the hospital.

Ambulance Department.—The work of this department has been carried out with its usual cheerfulness. During the bad weather the drivers and attendants were often out under very trying conditions.

The work of the maintenance staffs and hospital porters has been very efficient and helpful during the year.

The office staffs are to be congratulated on their share of the work in the smooth administration of this large hospital.

Almoner's Report.

Miss Van Gelder, Almoner, reports as follows :—

The old northern saying, " there's nowt so queer as folk," is never more amply illustrated than in the almoner's department. For it is with each patient's idiosyncrasies and problems particularly as they relate to his illness that the almoner deals. The different reaction to their condition, and the variation in response to treatment of two patients with the same illness, can often be traced, not only to personality, but also to difference in environment and social background. The necessity of regarding not the physical symptoms only, but the whole make-up of the patient if treatment is to be successful must be realised. The function of the almoner is to draw to the attention of the hospital staff, any social factors likely to influence the patient's condition and the treatment of it. She is the link between the individual as seen in the ward and his complex life outside. Since recovery will be delayed by anxieties she must endeavour to assist the patient to overcome any problems arising at home while he or she is in hospital. On discharge, she endeavours to ensure that factors likely to hinder convalescence are removed, and that any circumstances that precipitated the illness and may cause a relapse are adjusted. A great variety of work thus comes within the scope of the department and a review of the records for 1947 shows a vast complexity of problems. Those most frequently arising have been assistance when the patient's medical condition makes a change of work either desirable or essential, 20 such cases having been dealt with during the year ; care of the children whilst the mother is in hospital, 15 patients having been helped this way ; financial assistance for a particular need such as a special diet, laundry, bedding, etc., grants having been obtained for 12 patients ; rehousing where conditions were detrimental to the patient's health, an approach being made to the authorities in 10 cases where this was shown ; clothing, when the patient is going for convalescence and or when a long period off work makes assistance for the family necessary, help of this kind being obtained in 15 instances ; home helps when on discharge the patient was unfit to manage house duties ; requests of this kind having been made on 10 occasions ; handwork and home occupation for those likely to be bedridden or permanently unfit for work, six patients having been so assisted. Many more difficulties too numerous to mention have been dealt with. As illustration of some in greater detail, the following may be given.

S.T. was a boy of 13 who suffered from a condition that almost crippled him and had necessitated long periods in hospital. On discharge he had almost attained school-leaving age but was not fit for work. His mother had to take part-time employment and he, therefore, was spending much time alone without any occupation, or much prospect for the future. It was possible to obtain a vacancy for him at a special training college in the South of England where he could be taught a trade suited to his disability. The Education Authorities were approached and agreed to meet the fees. Reports received since indicate that he is very happy there, and is making good progress, while his health is improving, no doubt assisted by the fuller and more constructive life he is leading.

L.T. was a women who was in hospital for a considerable period. She has no relatives and whilst under treatment difficulties arose over her business, which caused her grave anxiety. The matter was one too complicated to leave to friends, and in any case necessitated legal advice which she could not afford. It was possible to arrange for the Poor Persons' Lawyer to visit her in hospital and the matter was taken up by this organisation thus relieving her of much worry and assisting her recovery.

T.S. was also a woman requiring prolonged in-patient treatment. She was very anxious regarding her financial position at home, as she was a widow with only a small income and had a son attending a secondary school. It was possible to arrange a financial grant through the Education Authorities, to help in his maintenance and so lessen her worries.

The majority of patients helped are those attending the medical department, since all these are interviewed on admission as a routine, and difficulties which otherwise may not come to light are discovered. Patients are referred from other departments where there is an obvious problem and the increase in the number of these sent during the year shows a growing demand for the service of the almoner. This demand is welcomed, but a limit has now been reached in the amount of work which can be undertaken and further developments cannot be made without increased staff.

Convalescence was arranged for 138 patients during the year, though in 19 instances cancellations were made. Patients who went away included 54 adults of whom 20 went to the Hospital Saturday Fund Homes, 46 children of school age, for the cost of whom the Education Department was responsible, and 19 children under school age. The total cost for those not covered by the Hospital Fund or the statutory arrangements was £204 6s. 6d. Grants totalling £105 were obtained from various sources to assist patients who would have had difficulty in meeting the expense, the Samaritan Fund assisted to the extent of £45 6s. 6d. and the balance was met by patient's own contributions.

Arrangements were made for 99 patients to be supplied with surgical appliances at a total cost of £352 6s. 9d. Grants amounting to £113 18s. 0d. were obtained, patients contributing to the balance according to their means. Glasses were fitted for seven patients at a cost of £8 10s. 6d.—£1 8s. 0d. being obtained towards this. Five artificial limbs were also ordered, three through the Ministry of Labour, one through the Ministry of Pensions and one direct with the limb fitters.

Nineteen forty-seven has seen the almoner's department, started in 1946, established on a firm foundation and it is possible to look forward to 1948 with its introduction of the new medical service, with confidence. Many changes will be brought about by the Act, the cessation of payment for treatment being one of the main provisions. Those who in the past have associated the almoner with the collection of fees, have wondered if this officer will still be necessary. Salford was sufficiently far-seeing to realise that assessment was not the true function of the almoner, and from the beginning it has been possible to concentrate on medico-social work as the real aim of the department. The introduction of the new scheme should not, therefore, bring any great changes, but it is hoped that it will give opportunities for extension so that a full service can be available for every patient in the hospital.

Hope Hospital School.

Miss Ashworth, Head Teacher, reports as follows :—

The varying numbers of children in hospital at different periods of the year has had its effect on the work of the school. Strangely enough, during the bad weather in the early part of the year, the numbers on the roll were fairly low, whereas during the summer the numbers increased considerably and remained high until the end of the year. During the year we have had 303 children on the roll but the number of pupils actually given tuition has greatly exceeded this, as there has been a large number of children in hospital for too short a time to allow of their being placed on the register.

There have been fewer orthopædic cases this year and most of the long-term cases have been children suffering from rheumatism or chorea.

A class for children suffering from cerebral palsy was opened at the end of January to which a small group of children, living at home, are brought each morning and afternoon. Accommodation and facilities for this class are as yet very far from adequate, but good work has been done with these children, who have hitherto been neglected so far as education was concerned, and most of them have made satisfactory progress both mentally and physically.

We held at the beginning of October, at the hospital, an exhibition of school work which displayed not only examples of handwork executed by the pupils but also gave a comprehensive picture so far as was possible, of all the work done in the school. The exhibition was very well attended, and provided a valuable opportunity for the staff to establish contact with the parents. The teachers would like to express their thanks and appreciation to the hospital staff for their co-operation and assistance.

It is necessarily much more difficult to provide entertainment for children in hospital, than for those in normal schools but we were able to include a film show in the Christmas festivities and to send a small group of children to the Opera House to see " Snow White and the Seven Dwarfs," and another group to see " Treasure Island " at the Intimate Theatre.

Library.

Miss Ashworth, Honorary Librarian, reports as follows :—

At the beginning of the year, the number of books issued by the library had fallen very considerably owing to the lack of helpers, and for some weeks several wards were unavoidably left unvisited.

Thanks, however, to the very valuable efforts of Toc H and the kindly assistance given by a number of members of the Weaste Congregational Church, we have been able to ensure that each ward is now visited by the library each week.

The number of books issued by the library during the year amounts to 7,469, a very considerable increase on last year, and although we have very few books in the library which might be regarded as having a literary value, the supply of light reading matter appears to meet the demand fairly adequately.

Occupational Therapy Department.

Miss Osburne, Occupational Therapist, reports as follows :—

On the 5th February, 1947, an occupational therapist was appointed to take over the occupational therapy department with the assistance of an occupational helper.

Since then, the work has expanded from 6 wards to 18 wards, which have included all types of patient, i.e., medical, surgical, orthopædic, gynæcological, chronic and venereal diseases. The aim of this work has been to aid concentration and give the patients an interest to prevent them worrying about their illness and injuries. Occupational therapy has been used, therefore, more as a divertional than as a cure, with the result that a great number of patients have found much benefit.

Some new handicrafts have been introduced into this hospital during the last few months and a number of articles have been made as under :—

Felt work	Toys, belts	3,020
Leatherwork	Purses, handbags, wallets, gloves, slippers, etc.	1,500
Embroidery	Miscellaneous	868
Rug making	Rugs, mats	39
Macrami work	Dog leads, belts, bags, etc.	108
Plastic work	Firescreens, lampshades, brooches	41
Knitting	Jumpers, gloves, socks, scarves, etc.	208
Jewellery	Bracelets, necklaces, brooches (worked in gold coil)	700
	Total	6,484

Occupational therapy does not mean just crafts, but any form of activity. Very often the occupational therapy department is looked upon to be merely one part of the hospital for crafts only, and nothing else. It is not possible to confine occupational therapy into a small space in the hospital. It is hoped to enlarge the occupational therapy department still further with additional staff when the opportunity arises, to enable this valuable work to make still more progress in the near future.

STATISTICS.

1. GENERAL—

	1945.	1946.	1947.
Total hospital beds	1,010	1,023	1,003
In hospital on 1st January	758	765	713
New admissions	9,236	9,214	8,675
Live births	1,384	1,556	1,599
	11,378	11,535	10 987
Discharges during the year	9,541	9,901	9,362
Deaths	1,072	921	889
Remaining in hospital at the end of year	765	713	736
	11,378	11,535	10,987
Mortality	10%	7·9%	8·1%

2. X-RAY DEPARTMENT—

	1945.	1946.	1947.
Number of patients	6,788	8,038	8,480
,, out-patients	2,931	3,424	4,233
,, in-patients	3,857	4,614	4,247

Details of X-rays taken :—

Chest		3,956
Genito-urinary		315
Cholecystography		125
Gastro-intestinal—		
barium meal	914	1,224
,, enema	239	
œsophageal	71	
Abdomen (general)		228
Bones and joints		2,180
Midwifery and gynæcology		549
Eyes, jaws, sinuses, teeth		251
Total examinations		8,828

3. PHYSIOTHERAPY DEPARTMENT—

	1945.	1946.	1947.
Total treatments including exercises	31,825	27,271	25,745
(*a*) *Massage :*			
Number of in-patients	287	275	257
,, out-patients	494	380	314
	781	655	571
Number of treatments :			
In-patients	7,654	4,655	6,963
Out-patients	9,211	8,575	7,269
	16,865	13,230	14,232

	1945.	1946.	1947.
(*b*) *Electro-therapeutics* :			
In-patients	240	197	177
Out-patients	555	503	459
	795	700	636
Number of treatments :			
In-patients	4,185	3,232	2,924
Out-patients	10,775	9,965	7,976
	14,960	13,197	10,900
(*c*) *Rehabilitation* (since 9th April, 1945) :			
Exercises in wards	21,149	29,880	31,554
„ hall	1,553	1,954	1,640
	22,702	31,834	33,194
(*d*) *Sunlight* :			
New in-patients	30	20	5
New out-patients	48	39	31
Number of treatments :			
In-patients	198	279	74
Out-patients	1,189	565	539
	1,387	844	613

4. OUT-PATIENTS DEPARTMENT—

	1945.	1946.	1947.
Dressings and treatments	9,001	7,780	9,189
Consultations	17,997	17,375	19,369
Blood donors	—	—	1,640
	26,998	25,155	30,198
Surgical Clinic (full-time staff) :			
Old patients	3,088	2,788	3,345
New patients	1,321	1,377	1,437
	4,409	4,165	4,782
Surgical Clinic (visiting staff) :			
Old patients	610	350	260
New patients	226	112	174
	836	462	434
Varicose Veins Clinic :			
Old patients	1,002	914	1,180
New patients	192	179	161
	1,194	1,093	1,341

	1945.	1946.	1947.
Casualties	324	692	451
Ear, Nose and Throat Clinic	1,726	1,146	997
Orthopædic Clinic	1,622	1,545	1,787
Gynæcological Clinic	2,085	2,264	1,816
Medical Clinic	3,357	3,732	4,389
Children's Diseases Clinic	482	512	917
Psychiatric Clinic	969	615	968
Special Medical Investigation Clinic	77	88	252
Skin Clinic	805	816	767
V.D. Investigations	12	9	14
Eye Clinic	—	212	311
Blood donors	—	—	1,640
Chiropody Clinic	—	112	395

5. TREATMENT OF CANCER—

Number of patients referred from Hope Hospital to the Radium Institute in 1947	59
Number of patients referred to Radium Institute in previous years and re-treated in 1947	17

Analysis of cases referred during 1947—

Number of patients treated by radium in Baguley Radium Annexe	3
,, ,, ,, ,, Institute	4
,, ,, ,, ,, Institute plus X-Ray	1
,, ,, ,, X-ray in Institute as in-patient	3
,, ,, ,, X-ray in Institute as out-patient	18
,, ,, ,, X-ray in Baguley Radium Annexe	2
,, ,, ,, X-ray in Institute plus special examination	2
,, ,, ,, X-ray in Institute plus other treatment	1
,, ,, ,, X-ray and radium in Institute plus special examination	1
,, ,, ,, Surgery plus radium	1
,, ,, ,, ,, ,, radon plus special exam.	1
,, ,, not treated (see analysis)	22
	59

Analysis of not-treated cases—

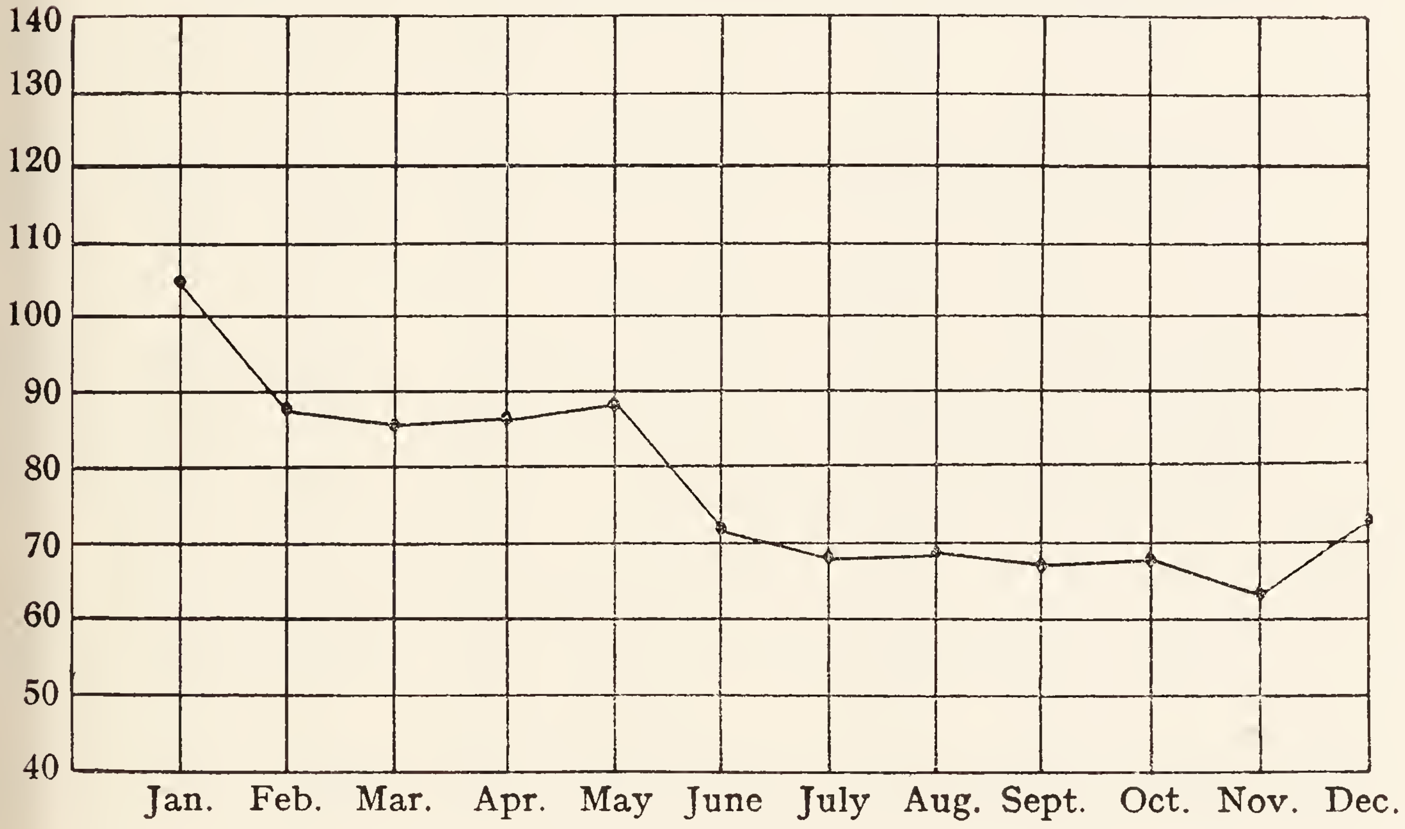
Unsuitable	4
Too advanced	6
Follow-up only	7
Referred for surgery	1
As at 31st December, 1947 (treated in 1948)	2
Patient's refusal	2
	22

Deaths—

Total number of deaths	889
Analysis of deaths :—	
Tuberculosis (all forms)	16
Cancer	174
Maternal deaths	6
Senility	132
Respiratory diseases	189
Cardiac diseases	124
Gastro-intestinal diseases	32
Genito-urinary	60
Accidental death	27
Babies within 10 days of birth	64
Other causes	65
	889

Dying within 24 hours of admission—28.

Table showing Incidence of Deaths throughout 1947.



SUMMARISED STATISTICS RELATING TO HOPE HOSPITAL.

	1944.	1945.	1946.	1947.
1. Number of Patients Treated	11,020	11,378	11,535	10,987
2. X-ray Department—				
Number of patients treated	6,328	6,788	8,038	8,480

	1944.	1945.	1946.	1947.
3. PHYSIOTHERAPY DEPARTMENT—				
Number of massage treatments.......	18,306	16,865	13,230	14,232
Number of electro-therapeutic treatments	12,631	14,960	13,197	10,900
Number of ultra-violet ray treatments	—	—	844	613
	30,937	31,825	27,271	25,745
Rehabilitation treatments	—	22,702	31,834	33,194
4. OUT-PATIENTS DEPARTMENT—				
Number of dressings and treatments	9,902	9,001	7,780	7,196
Number of consultations	15,850	17,997	17,375	19,369
	25,752	26,998	25,155	26,565
5. SURGICAL WARDS—				
Number of operations performed ...	3,680	3,946	3,910	3,200
No. of out-patients (general)	5,672	6,539	6,412	7,008
Orthopædic Department :				
New admissions	532	384	286	312
Out-patient attendances	1,373	1,622	1,545	1,517
Ear, Nose and Throat Department :				
Patients	1,958	1,726	1,146	997
Operations..............................	800	826	685	691
6. MEDICAL WARDS—				
Infectious diseases	237	153	209	168
Out-patient attendances	3,383	3,357	3,732	4,389
Electrocardiograms.......................	542	571	666	758
7. MATERNITY DEPARTMENT—				
Deliveries..................................	1,461	1,438	1,627	1,645
Ante-natal attendances	11,177	11,839	15,325	18,231
Post-natal attendances..................	746	698	796	958
Puerperal pyrexia........................	22	18	48	41
Maternal deaths (whole hospital) ...	13	8	12	6
8. GYNAECOLOGICAL DEPARTMENT—				
Out-patient attendances	1,679	2,085	2,264	1,816
Number of operations	917	957	924	723
9. V.D. WARDS—				
Number of cases	124	232	215	190
10. CHILDREN'S DISEASES CLINIC—				
Number of attendances	502	482	512	917
11. PSYCHIATRIC CLINIC—				
Number of attendances	834	968	615	968
12. CANCER TREATMENT—				
Number of cases	60	68	85	59
13. PATHOLOGICAL INVESTIGATIONS	34,917	34,314	34,692	43,399

TABLE SHOWING THE WORK OF THE HOSPITAL SINCE 1914.

Year.	*Admissions.*	*Births.*	*Discharges.*	*Deaths.*	*Average Daily. No*	*Operations.*
1914.......	2,728	12	2,135	591	749	149
1915.......	1,632	4	1,393	491	514	160
1916.......	1,330	—	941	353	439	175
1917.......	1,263	3	1,058	335	407	145
1918.......	1,402	16	1,104	391	303	144
1919.......	1,559	7	1,066	348	339	107
1920.......	2,516	64	1,736	451	689	163
1921.......	3,335	227	2,899	617	858	332
1922.......	3,720	263	3,272	745	888	395
1923.......	4,463	250	3,749	815	870	430
1924.......	4,416	182	3,742	922	811	823
1925.......	5,315	293	4,292	1,015	868	802
1926.......	5,471	366	4,839	903	943	882
1927.......	5,801	409	5,125	1,003	943	882
1928.......	6,430	559	5,545	926	960	1,076
1929.......	7,477	674	6,936	1,141	918	1,405
1930.......	7,583	685	7,150	1,038	969	1,807
1931.......	7,963	812	7,762	1,093	919	2,004
1932.......	8,521	843	8,156	1,052	961	2,186
1933.......	8,031	615	7,572	1,084	940	2,201
1934.......	7,893	745	7,548	1,081	940	2,080
1935.......	8,371	782	8,079	1,020	912	2,152
1936.......	9,504	961	9,291	1,122	977	2,691
1937.......	10,156	1,086	10,012	1,241	1,021	3,035
1938.......	11,059	1,312	10,042	1,077	937	2,970
1939.......	8,939	1,285	9,043	1,108	867	2,518
1940.......	9,616	1,338	10,746	1,483	1,060	2,521
1941.......	6,155	574	5,098	911	444	2,337
1942.......	7,835	1,154	7,760	894	648	3,392
1943.......	8,489	1,316	8,797	927	707	3,792
1944.......	8,930	1,461	9,282	980	740	3,680
1945.......	9,236	1,445	9,541	1,072	800	3,946
1946.......	9,214	1,627	9,901	921	762	3,910
1947.......	8,675	1,645	9,362	889	760	3,200

REPORT
OF THE
SCHOOL MEDICAL OFFICER

To the Chairman and Members of the Education Committee.

Mr. Chairman, Ladies and Gentlemen,

I give below the terms of a charter for childhood which we may take as a description of some of the aims of the School Health Service.

> " . . . *men and women of all nations recognising that Mankind owes to the child the best that it has to give, declare and accept it as their duty that* :
>
> 1. *The child must be given the means requisite for its normal development, both materially and spiritually.*
>
> 2. *The child that is hungry must be fed ; the child that is sick must be nursed ; the child that is backward must be helped ; the delinquent child must be reclaimed ; and the orphan and the waif must be sheltered and succoured.*
>
> 3. *The child must be the first to receive relief in times of distress.*
>
> 4. *The child must be put in a position to earn a livelihood and must be protected against every form of exploitation.*
>
> 5. *The child must be brought up in the consciousness that its talents must be devoted to the services of its fellow-men."*
>
> ("*Declaration of Geneva*" *of the Rights of the Child*).

Good school health services are essential to a community such as Salford school children, for here are adverse environmental conditions—a savage legacy of the worst side of the industrial revolution. The School Health Service provides one of the channels by which our community may cherish the children of our city in caring for body, mind and personality.

Our work in 1947 was a further development on previous lines in trying to take a *greater care of the individual child* chiefly by expanding specialist and clinical services. For example, the asthma clinic (page 32) provided specialist care for an important group of handicapped children. The child was given the benefit of full clinical investigation ; skin tests were done in appropriate cases in an endeavour to find out the factor responsible for the asthma. The interest of all members of the School Health Service was aroused in the problem, and as a result, despite the difficult days in which we live, some worthwhile recommendations were made—in suitable cases certain specific desensitisation, in others physical methods of treatment such as breathing exercises and convalescence. Recommendations were carried out in a few cases, with the co-operation of the Housing Committee, for a change of housing accommodation, and it was felt that in those and other conditions something had been done to improve the health of these children.

A venture which had a useful year's work was the special class for *spastic children* (page 188).

An incident which gave the greatest pleasure during the year was the de-certification and de-notification of a spastic child who had hitherto been regarded as mentally deficient as a result of his severe disability and speech defect, and whose intelligence was proved subsequently to be not subnormal.

An incident in which a peril was averted was in connection with a child aged five, whose appearance gave the impression of mental deficiency. There is, however, a rule in this department that any such child should have his hearing tested. This was done by the kind co-operation of the Drs. Ewing, of the Department of Education of the Deaf, the University, Manchester, 13, and it was found his defect was primarily that of partial deafness. Here again was a case of a boy who could not make the necessary response to questions asked in the intelligence test owing to physical disability.

A *foot health survey* (page 202) was made during the year by your chiropodist and the following is a summary of the conditions found :—

Verrucæ, corns and callosities, ingrowing toe-nail, weak and flat foot, chilblains, conditions needing referral to orthopædic surgeon and other conditions.

A special survey of 20,032 Salford school children for *verminous infestation* was made (page 207), and it was found that 24·6 per cent. of the girls, and 8·4 per cent. of the boys examined, were infested.

A similar survey of the incidence of *scabies* by an experienced technician was made. Diagnosis by extraction of a live mite showed an incidence of ·12 per cent. (less than one-quarter of the incidence of four years ago) as will be seen from the diagram on page 192.

As a result of a routine examination of urine, one boy was discovered to be a diabetic. Insulin treatment was advised, and the boy put on 39 lbs. in weight. This illustrates the value of making a routine medical inspection more comprehensive, by including urine tests.

Other features of the work of the year were the greater use of *medico-social services.* Twice the number of children were sent for convalescence as in the previous year, and many problems such as the provision of clothing, etc., were solved.

The incidence of infectious disease was not high. Over 90 per cent. of our school children are immunised against diphtheria. Eight cases of infantile paralysis occurred in our school population, with one death.

Useful administrative developments were made. Our register of handicapped children was revised and new record cards on the Cope-Chat system were instituted. The following are the numbers of handicapped children on our register :—

Blind pupils	5
Partially sighted	30
Deaf	27
Partially deaf	89
Delicate	248
Diabetic	5
Educationally subnormal	184
Epileptic	15
Maladjusted	36
Physically handicapped	57
Speech defects	621
Suffering from multiple defects	33

Co-operation with Parents.

A new illustrated leaflet in colour entitled " Starting School " was devised and sent out to the parents, in order to impress upon them some of the principles of child health, and to encourage them to use the facilities available.

The Parents' Club described on page 24 also had a successful year. We try to become friends of the parents, for have we not the same end in view—better health for the children ?

Co-operation with Teachers.

More use was made of the school nurse to pay a daily visit to the schools, in order to bring the clinic services to the child, rather than bring the child to the clinic. This policy means that a greater number of children come under the view of the nurse, and much school time (and not a little truanting) is saved. For children who have to attend for treatment over a long period, there is always the risk of missing important lessons—one boy in the past had missed six consecutive arithmetic lessons ; another boy a similar number of French lessons. It is obvious that this serious interruption of education must be remedied.

I wish to record appreciation of the helpfulness shown by you, Mr. Chairman, Ladies and Gentlemen, the Director of Education (Mr. F. A. J. Rivett, M.Sc.), and the medical, nursing, teaching and administrative members of the staff of your Committee.

Yours faithfully,

J. L. Burn

School Medical Officer.

Report on the Work in the Ear, Nose and Throat Clinic.

Dr. Cavanagh reports :—

The work of the Ear, Nose and Throat Clinic has continued throughout the year. Since June we have been able to hold a second clinic each week and as a result we have examined 2,023 children, compared with 1,341 in 1946. In spite of this, we found that children were still waiting many weeks before being seen by the Aural Surgeon. Therefore in December we started to hold a third session weekly, and we now hope that it will soon be possible for a patient to see the specialist the week following the request for such advice.

As before, the policy of giving detailed and intensive care to all cases of recently discharging ears has been rewarded by healed drums and the return of normal hearing.

Much attention has also been given to old-standing cases of suppuration in the ears, but though some successes have been achieved there are many disappointments. It cannot be too strongly urged that a case of chronic suppurative otitis media is a serious reproach to those who have had the care of the children. If these cases are seen at the outset and treated efficiently there should be virtually no chronic aural suppuration.

A further development of special interest is the establishment of a clinic for research on the subject of " Catarrh." This is being carried on as part of the work done under a Nuffield grant. Many points of interest have arisen but the full report is not yet available and will be published later.

The lip-reading class is a great help to the partially deafened child, but there is a real need for special " hard-of-hearing " classes. There are so many children whose deafness handicaps them seriously in an ordinary school and yet one is not justified in sending such cases to a school for totally deaf children. These intermediate cases often, therefore, suffer seriously from lack of special facilities and it is to be hoped that Salford will soon provide help for them.

The Ophthalmic Clinic.

Dr. John Scully reports that during the past year this Clinic has been held five times weekly at Victor Street, together with an operating session once per fortnight at the municipal hospital. The clinic is under the supervision of an Ophthalmologist, with a trained Nurse and an Orthoptist, and 7,126 attendances have been made during the year. These were, errors of refraction, 1,822, and other defects or diseases of the eye, 463. Children attend this clinic who suffer from defective vision, squint and external diseases of the eye. They are referred by the School Medical Officers in their routine inspection of the schools, by general practitioners and opticians, by the teachers and in increasing numbers by the parents themselves. Children of all ages, from birth to leaving school, including secondary schools, are referred for treatment.

Refraction Clinic. Children attend who are suspected to be suffering from some defect of vision. The normal attendance is three visits. At the first, a test of vision is taken and any squint or other external abnormality is noted. If a defect of vision is found, mydriatic eye drops are given for daily application for a week. These drops affect the sight of the child for reading and close work, but the distant vision is unaffected, so the children can attend school but are unable to read. In the case of Grammar School children drops are only given for one or two days so as to avoid interference with their studies. At the second visit a refraction and complete examination of the eyes is made and a subjective test with lenses is completed and finally a prescription for glasses is given, where the children are illiterate and are too young to do the " E " test. The children who know their letters or are able to do the " E " test are asked to make a third visit to the clinic when a post-mydriatic test is done and a prescription is made. The child is then directed to the optician who measures him/her for spectacles. When the glasses are ready, the child attends finally to collect them when the lenses and fitment of the frame are examined and the child's distant and near vision wearing glasses are tested—any necessary adjustment being made. Spectacles are supplied to the children immediately on completion, irrespective of payment. The nickel silver framed glasses are now supplied free of charge, but if parents desire a more elaborate frame, a deduction is made corresponding to the price of the free glasses.

Contrary to expectation, the fact of free provision has not involved abuse, but has resulted in an increased willingness to obtain and wear glasses, and there is no noticeable increase in breakages.

Artificial eyes are now supplied free of charge, and it is gratifying to note that none of the few children to whom this applies has been without an " eye."

A high percentage of cases referred attend this clinic and are accompanied by their parents or a responsible adult, and this number is increasing. The parents are invariably co-operative and willingly follow the instructions and advice given, obtaining glasses if recommended. There is a noticeable diminution in prejudice against the wearing of glasses since they were provided free. This minimum prejudice from parents and children is generally due to fear of accidents and breakages, or fear of teasing from other children ; but most frequently prejudice is unspecified against the wearing of glasses. This is overcome where the advantage to be gained by better sight was demonstrated.

All repairs and adjustments are dealt with immediately and are not placed on the waiting list. All cases sent as " urgent " by the teachers and doctors are given an early appointment, also Child Welfare cases and older children accompanied by parents who are concerned about their children's sight.

The number of glasses prescribed, 1,671, may seem high—it should be noted that these are not all new cases, many being a change of prescription from that which the child has previously been wearing. The number of repairs is similar to that in previous years and these are now attended to more promptly and effectively. Glasses are never prescribed unless essential for the good of the child's sight and for the alleviation of symptoms.

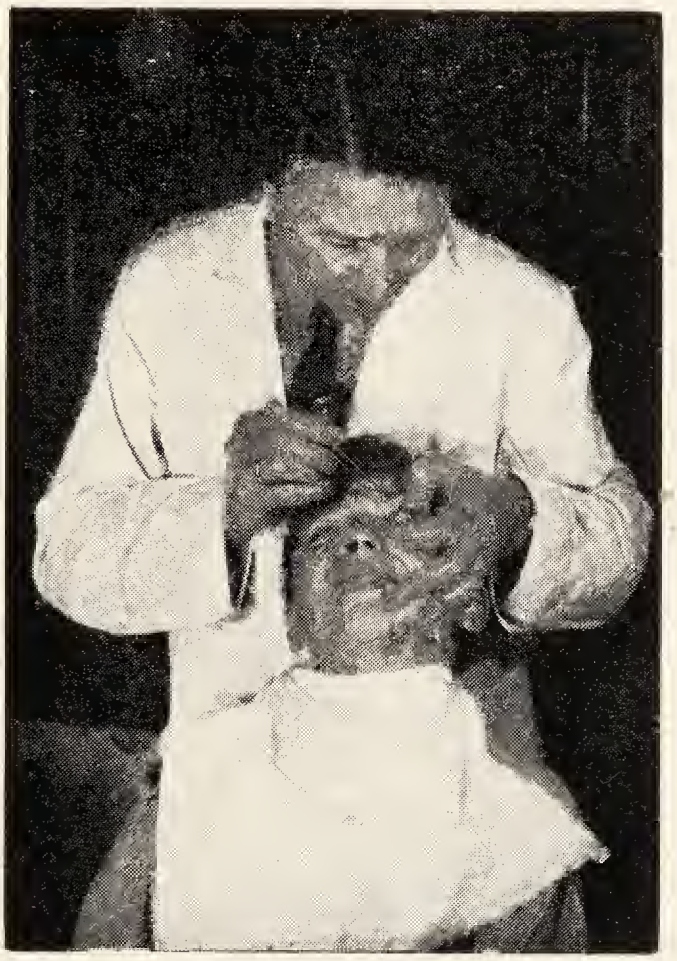


Fig. 1—A nurse at work in the Opthalmic Clinic.

There are a number of children at present in ordinary schools who would be better accommodated in special sight-saving classes. These number 29. They are composed of children with high myopia, and other children with diseases or degeneration of the retina. Steps are now being taken to accommodate such handicapped children.

Increasing advantage has been taken during the year of referring cases for further treatment to the out-patient department at the municipal hospital.

Defective Vision. Children with defective vision may be divided into hypermetropes, myopes and squints.

Hypermetropia (Long Sight).

These form the majority of cases and may be divided into simple hypermetropia and compound hypermetropic astigmatism. They are defects from birth, and are due to the shape of the eye being short in length from before backwards ; and in the case of the astigmatics the curvature of the cornæ is not equal over the whole of the surface. Symptoms may be caused at any time in life, but are most frequent when there is increased close work, and consists of headaches, difficulty with close work, reading, sewing, etc., and an inability to see accurately what is written on the board when in school. Glasses are usually prescribed for all the time in school and close work at home, but in the higher degrees, they may have to be worn constantly. There is a tendency to improve as the child grows older and troublesome symptoms are avoidable when glasses are worn.

MYOPES (Short Sight).

These include cases of simple myopia and compound myopic astigmatism. Myopia usually shows itself in the slightly older child from 10 years upwards. It is generally due to an increase in length from the front to the back of the eye, and tends to increase during the growing years, especially in the teens, usually ceasing to deteriorate when general growth stops. In some cases it is hereditary and then shows itself at a much earlier age, and is consequently more serious. The main symptom is difficulty with distant vision, seeing the board in school, destinations of trams and buses, though reading and close work may be quite clear. In the early stages headache may be present but not always. Thus the condition is often definitely established before any complaint is made. Glasses are invariably prescribed in these cases and advice is given to wear constantly, because though the children can see to read quite well, excessive close work tends to aggravate the condition. These children are warned against reading too much and especially for too long a time. In early cases one sometimes has to insist on the child wearing glasses as he or she does not realise what good distant vision may mean.

Much time is spent with children suffering from myopia in making sure that the parent and child understand instructions. Typed copies of instructions are handed out in each case. Myopia is more prevalent in the Secondary Schools because of the extra study these schools entail, and because of the longer school life—this being especially the growing period of life, the usual time for Myopia to increase. It is important to try to arrest the progress of the Myopia in the early stages as these children often wish to continue their studies at college or elsewhere—many professions are closed to applicants with a high degree of Myopia. Myopes are invited every six or twelve months, re-examined and their lenses changed according to the progression of the Myopia.

STRABISMUS (Squint).

These patients may be Hypermetropic or Myopic (usually the former) and one eye may turn inwards or outwards (usually the former). The defect is obvious to the parent, who usually seeks advice soon after its commencement.

Glasses are invariably prescribed in these cases and constant wear is advised, whatever the age of the child, provided the child is stable on its feet. Parents are usually quite willing to obtain glasses however young the child. After the child has obtained the glasses he/she is referred to the Orthoptist for treatment. This consists in occlusion of the " good " eye in order to improve the vision of the squinting eye, because a squinting eye invariably has defective sight. This treatment may start as early as three years old. The child is seen every 2-4 weeks, and the vision of the two eyes noted. When the vision of the two eyes is equal, occlusion ceases, and then at seven years of age treatment on the synoptophore is started, to develop binocular vision. Often by this time the squint has disappeared, certainly whilst wearing the glasses. In cases where the squint is still present whilst wearing glasses and after a course of Orthoptic treatment, an operation may be necessary to straighten the eye and so cure the squint but this will not improve the vision of the squinting eye if still defective. Operations are now being performed at Hope Hospital fortnightly. The children are admitted for two weeks, then if everything is satisfactory, they are sent home and referred to the clinic for post-operative treatment. They are also seen after operation by the surgeon at Hope Hospital Out-patients' Department. They do no close work for another two weeks, and do not attend school. Then they may resume normal school and home life but are examined frequently until the eye has completely settled down. In some cases they are able to leave off wearing their glasses, but this depends entirely on the state of the vision.

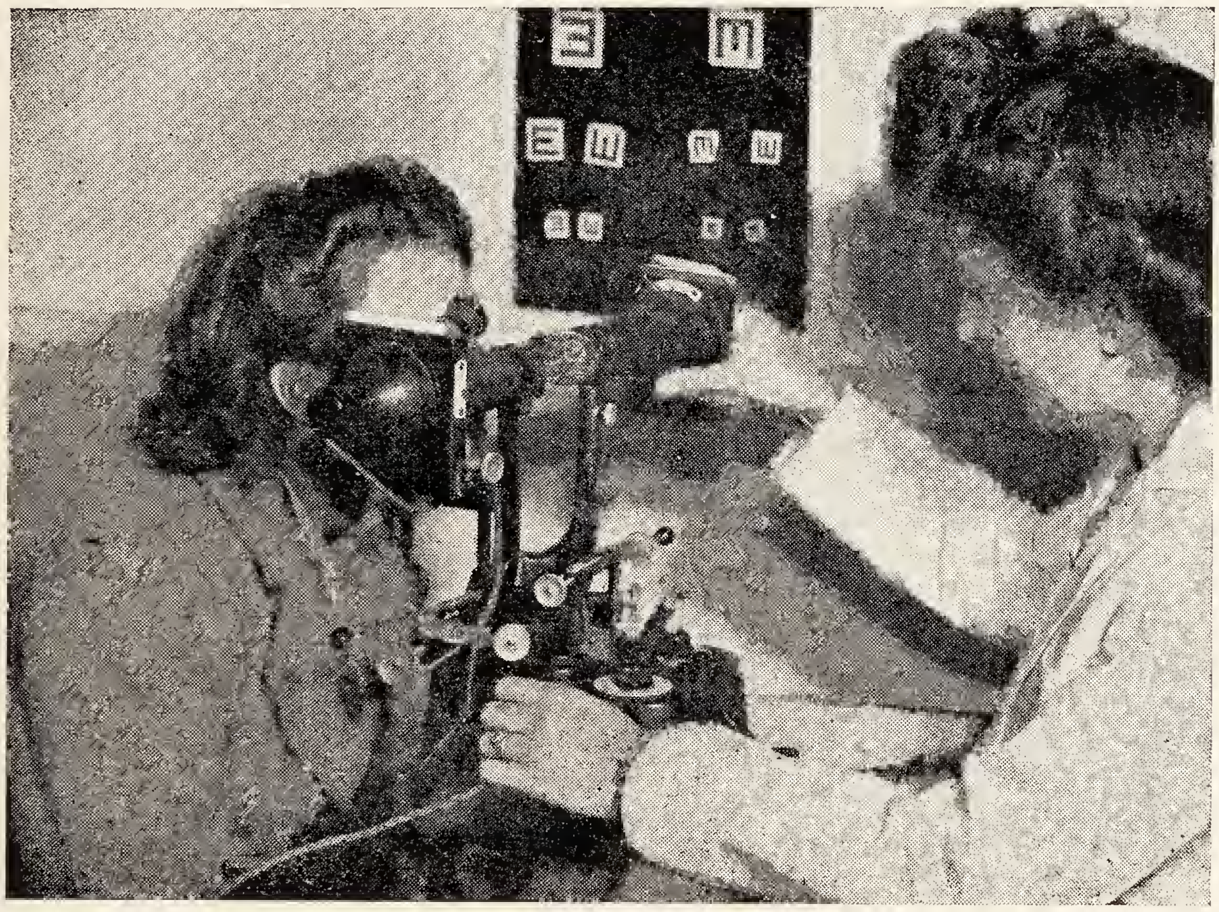


Fig. 2.—Use of synoptophore treatment of squint by exercises.

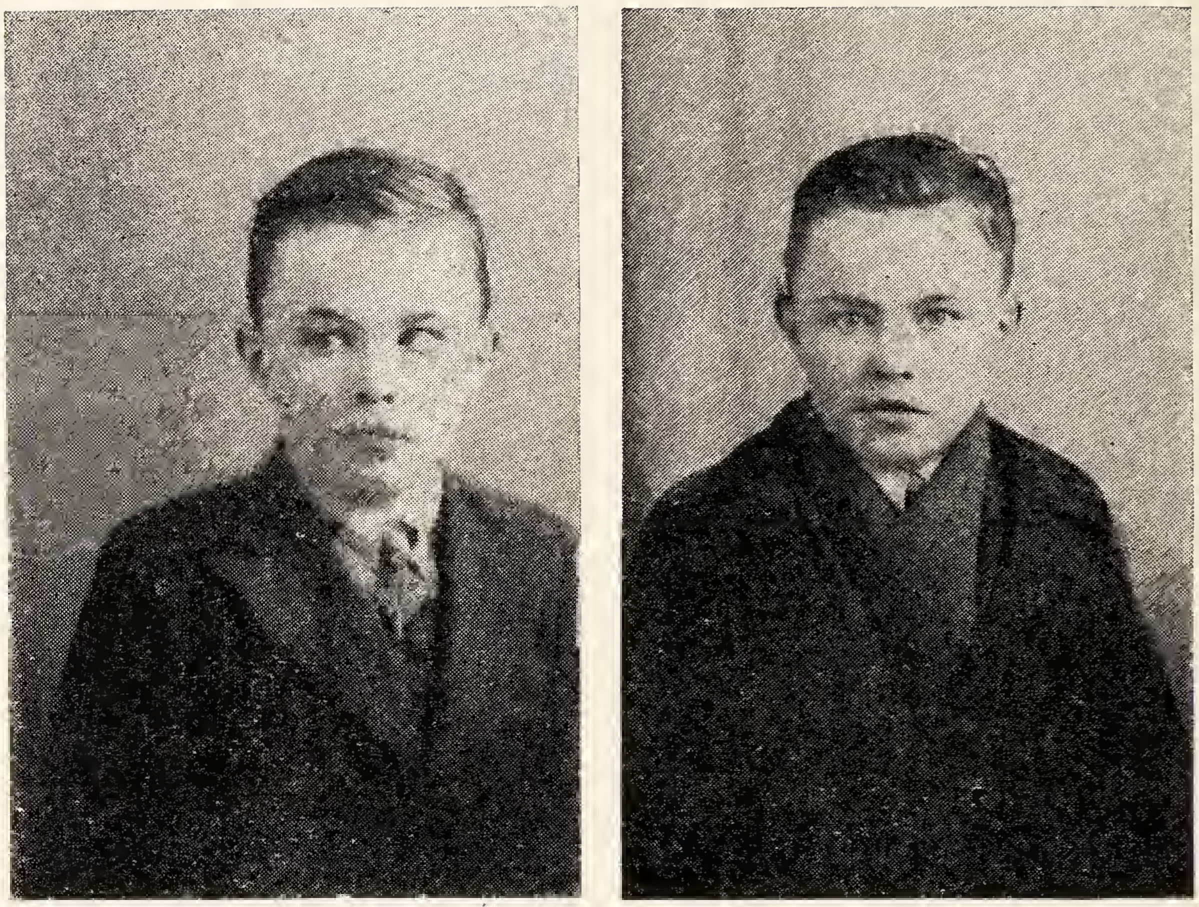


Fig. 3—Squint. Before and after exercises and operative treatment.

The following is a list of the cases treated by the Orthoptic Department during the year :—

Had treatment	116	
Occluded during year	248	
Too young for testing or awaiting exercises	215	
Had operation for cure	29	
Had operation for cosmetic result	19	
Awaiting operation for cure	6	
Awaiting operation for cosmetic result	14	
Discharged cured	38	
Discharged cosmetically straight	20	
Discharged improved	2	
Unsuitable for further treatment	3	
Refused operation	3	
Left the district	3	
New cases referred by doctor—Boys	160	305
Girls	145	
Cases referred to Hope Hospital	24	
Total number of treatments given—Boys	547	1,392
Girls	845	
Total number of attendances for occlusion and test—Boys	1,163	3,457
Girls	2,294	

There has been again a large attendance of children under school age. Many of these have squints, and if constant, and the child is safely walking, glasses are prescribed. Thus the child with a squint is seen early, and treatment started. By the time the child goes to school and starts close work, the squint has often disappeared and so the incidence of squint in later life is considerably lessened. If the squint is not constant in these tiny children and only seen occasionally, Mydriatic drops (dilating) are given for the " good " eye and the child is seen at intervals of two to four weeks. The squint frequently improves and may even disappear.

INTERNAL EYE DISEASES.

These are discerned on internal examination of the eyes under Mydriatic drops, and are comparatively rare. Treatment is advised, and the child is seen frequently. As these are often due to general causes, the child is referred to special departments such as the Municipal Clinic, Tuberculosis Department or to Hospital, for further treatment which cannot be given at the clinic.

EXTERNAL EYE DISEASES.

These comprise external diseases of the eyes and lids, and are often referred from other clinics. The number of cases varies with the time of the year, such diseases being more prevalent in the spring and autumn when there are cold winds and variable weather. General health is usually lower in spring following the winter. The children are examined, treatment advised and given, and they are seen regularly until cured.

Cases of chronic Blepharitis are becoming rarer, due to modern methods of treatment which are applied regularly, and because of persistence in treatment after an apparent cure. It is also due in many cases, to the wearing of spectacles for correcting astigmatism. The more serious types of inflammation such as phlyctenular conjunctivitis and ulcers of the cornea, both of which are likely to lead to defects of vision, are also not so frequent. This again is due to modern medicine clearing up the condition more quickly, before permanent injury is done to the eye, and also to the children's persistence in the treatment both during and after the attack. In many cases these are due to low general health, and the children are referred to the Sunlight Clinic and ordered vitamins, Cod Liver Oil and Malt.

The acute suppurative conditions are rarely seen now because the child is treated in the early stages before the deeper tissues are involved.

" Styes " are not seen so frequently now, and the milder infections of lids and conjunctivæ are treated and cured before they involve deeper tissues and the condition becomes chronic.

The milder conditions of Conjunctivitis are still seen, but quickly clear up under regular treatment, and leave no after-effects.

These children are rarely advised to be absent from school, as experience teaches that the condition clears up quicker when the child attends school and attends the clinic regularly, which they tend not to do if absent from school. The risk of infection to other children is very remote, except in the rare cases of acute suppurative conditions.

In many cases both parents are at work during the day leaving the children to play unsupervised in dirty surroundings, and aggravate their condition by rubbing the eyes. In school, however, under more regular supervision such aggravation is often avoided.

Babies are referred to the clinic from the Child Welfare Department with lachrymal obstructions and slight infections of the eyes dating from birth or the early weeks of life. These quickly clear up with modern treatment when applied regularly by the mother, and more permanent damage to the eyes is prevented.

Consultant Skin Clinic.

During the year 1947 the work of this clinic has continued to expand. The object of this service is to provide easily accessible clinics where consultant facilities are available for Salford school children and infants suffering from diseases of the skin. This category of case, forms over 95 per cent. of the attendances but the clinic is also open for adults.

The clinic is held on each Thursday afternoon at 2-30 p.m. at Regent Road and is attended by the consultant dermatologist, Dr. A. J. Gill.

In addition to these facilities a dermatological out-patient clinic is held at Hope Hospital each Wednesday at 10-30 a.m., and beds are available for skin cases in this hospital.

The work of the two clinics has been correlated to a great degree and treatment and follow-up can be interchanged.

There has been a big decrease in numbers of Scabies and Impetigo, following upon intensive treatment the previous year with Benzyl Benzoate and Penicillin Spray respectively. Most cases of Impetigo are not included in the figures this year as they have been treated in the School Clinic, and the special clinic for treatment by Penicillin Spray has been omitted.

Total attendances 816, compared with 736 (corrected for Impetigo figures) for 1946.

Amongst interesting features of the year's work are :—

1. *Use of Alpha rays.*—Short wave-length rays of the Grenz type—by means of Thorium X.

A number of strawberry nævi in babies and infants, particularly on the face, have been treated by monthly applications of Thorium X in varnish. Results so far to date are good, particularly from the cosmetic point of view and after two to three months a gradual flattening and increasing pallor of the lesions occurs. Thorium X has also been used in the clinic on cases of Alopecia Areata, Acne Vulgaris, Infantile Eczema and Plane Warts. It is too early to say as yet, what the results are likely to be (except in the case of Plane Warts where the results are uniformly good).

2. The majority of cases of Impetigo have been treated by means of Penicillin Cream (Lannette wax base). It has been found that certain cases do not clear up on this treatment within seven to ten days. Almost without exception in these cases there is an underlying resistant Seborrhœic Dermatitis (often manifested by a chronic post aural fissure).

3. The new Anti-Histamine type of drugs (e.g., Benadryl ; Anthistan) has proved very useful in the control of pruritus (Urticaria, Prurigo, Allergic Eczema). Their effect, however, is purely temporary and symptoms often return on withdrawal of the drug. As a means of alleviation, pending search for the antigen involved, they are most valuable. A good example of their value is the almost specific effect they have on the Urticaria following Penicillin sensitivity.

Dental Report.

Submitted by Mr. L. H. Pollitt, L.D.S.

In the course of the year, 16,359 pupils were inspected at school by the dentists and 1,094 special children were referred by the Medical Officers. Of these, 10,008 were found to require treatment and 7,308 accepted, a percentage of 73. The policy adopted two years ago of doing nearly all extractions under general anæsthetics has been, I think, more than justified and 1,814 permanent teeth and 6,733 temporary teeth were extracted during the administration of 3,476 general anæsthetics. It should be pointed out that the rather high proportion of permanent teeth extracted is not entirely due to caries. In many cases the four permanent molars are removed to preserve symmetry and 5·3 per cent. of the permanent teeth were extracted to remove overcrowding and for orthodontic treatment. In addition to the work referred to, 3,860 permanent teeth and 773 temporary teeth were filled and 3,232 other operations were carried out.

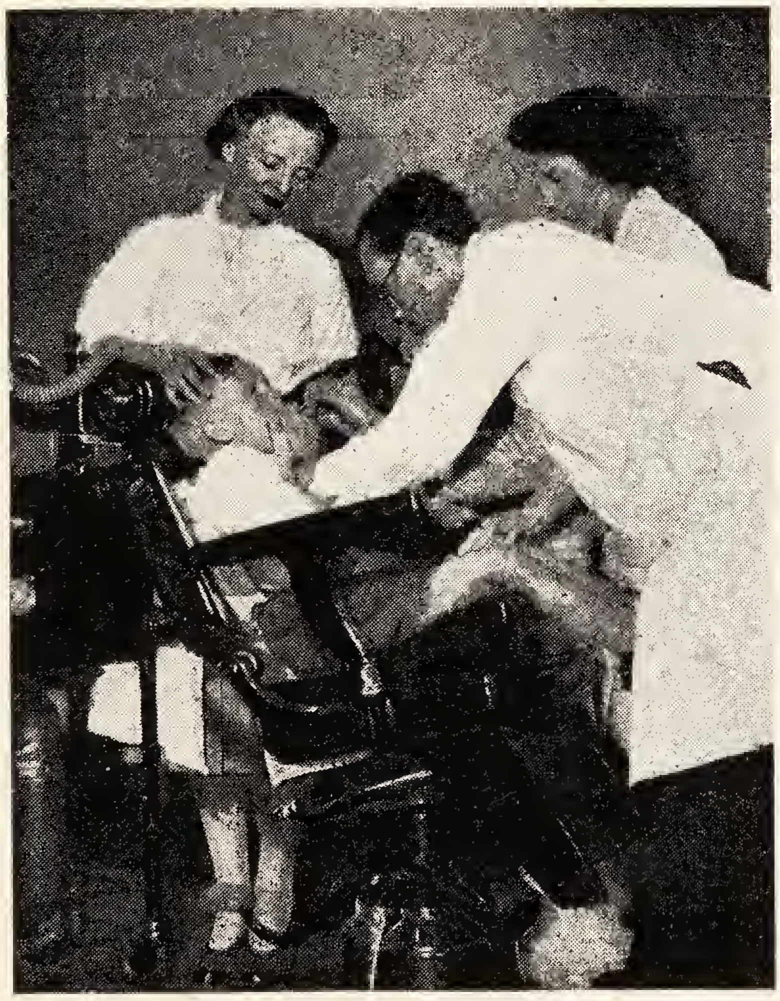


Fig. 4—The Dental Clinic.

The orthodontic service continues to show increasing popularity and in spite of considerable difficulties due to lack of accommodation and facilities there has been a steady increase of the work. During the year 743 visits were made by school children.

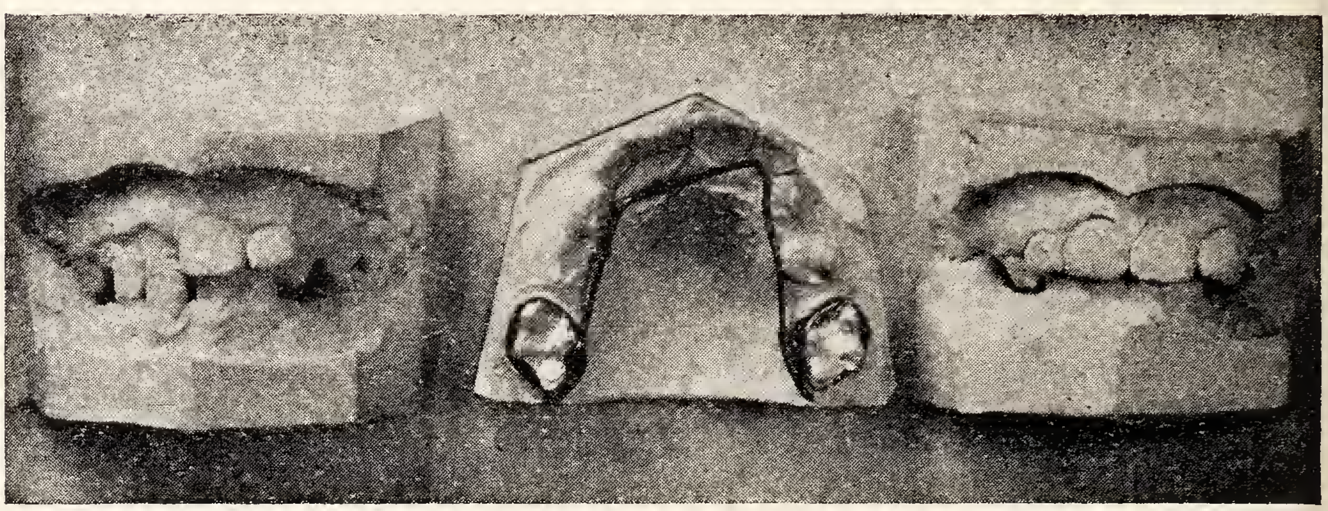


Fig. 5—Plaster casts of the teeth before, during and after orthodontic treatment.

It is hoped that the opening of a new clinic at Encombe Place will provide the facilities required for further improvements to the orthodontic service in particular, and by reducing the present overcrowding in the other clinics, will enable the officers there to increase their output.

A survey was carried out at the beginning of the year of the children at the day nurseries and of 209 infants examined, 12 were found to be in need of dental treatment. The general condition of the teeth was extremely good and confirms the findings of school dental officers in other parts of the country that there seems to be a definite improvement in the dental condition of the school population.

Open-air School.

Since the school was opened in 1924, no important structural changes have taken place and the building is far too small for the 100 children on the roll. The original scheme for the school included four classrooms, but these were cut down to two owing to a lack of approval for Government Grant for the fuller scheme.

In spite of its drawbacks the school gives health, happiness and confidence to the delicate children who spend a year or more in it. This school on the hill not only supplies regular meals and rest, but sunshine and fresh winds which invigorate and give that joy in life which delicate children so often lack.

SUMMARY OF CHILDREN DISCHARGED IN 1947—TOTAL—68.

Average increase in weight	6·6 lbs.
Average stay in weeks	53·8
Average age on entry	9·0 years

REASONS FOR LEAVING—

Returned to ordinary school	60
Scholarship to secondary school	1
Removal	1
Parents' Request	1
Left to go to work	5

DIAGNOSIS.

Delicate	20	T.B. Contact	4	Cerebral Paralysis	1
Bronchitis	11	T.B. Lungs (non-active)	2	Kidney and Ear Disease	1
Malnutrition	6	T.B. Bone (non-active)	2	Psoriasis	1
Asthma	6	T.B. Joint (non-active)	1	Chronic conjunctivitis and blepharitis	1
Anæmia	5	T.B. Gland	1		
Epilepsy	5	Adenitis	1		

Hope Hospital School.

The varying numbers of children in hospital at different periods of the year has had its effect on the work of the school. Strangely enough, during the bad weather in the early part of the year, the numbers on roll were fairly low, whereas during the summer, the numbers increased considerably and remained high until the end of the year. During the year, we have had 303 children on roll but the pupils actually given tuition has greatly exceeded this, as there have been a large number of children in hospital for too short a time to allow of their being placed on the registers.

There have been fewer orthopædic cases this year and most of the long-term cases have been children suffering from rheumatism and chorea.

A class for children suffering from cerebral palsy was opened at the end of January, to which a small group of children living at home, are brought each morning and afternoon . Accommodation and facilities for this class are as yet very far from adequate, but good work has been done with these children, who have hitherto been neglected so far as education was concerned and most of them have made satisfactory progress both mentally and physically.

We held at the beginning of October, at the hospital, an exhibition of school work which displayed not only examples of handwork executed by the pupils, but also gave a comprehensive picture, so far as was possible, of all the work done in the school. The exhibition was very well attended and provided a valuable opportunity for the staff to establish contact with the parents. The teachers would like to express their thanks and appreciation to the hospital staff for their co-operation and assistance.

It is necessarily much more difficult to provide entertainment for children in hospital, than for those in normal schools, but we were able to include a film show in the Christmas festivities and to send a small group of children to the Opera House, to see " Snow White and the Seven Dwarfs," and another group to see " Treasure Island " at the Intimate Theatre.

Children Suffering from Cerebral Palsy.

Our register of handicapped children contains the names of 50 sufferers from cerebral palsy. We know that at least 20 of these children, and probably more, are of normal intelligence, whilst those who are apparently ineducable number only six. The spastic condition of the three children of school age who are not attending school is complicated by other defects, e.g., severe epilepsy, partial sight, and mental condition.

A special class for these children was opened at Hope Hospital on 27th January, 1947. The children are brought from home to the hospital by ambulance —a small group of boys coming in the morning and a group of younger children in the afternoon, making a total of ten. The room in which the class is held provides very inadequate accommodation, but it is light and conveniently placed.

Owing to several unfortunate changes of staff the work of the class has lacked the continuity and attention which would have been so valuable in its early stages, but in spite of this much good work has been done, and most of the pupils have made satisfactory progress. One boy, previously certified as ineducable, has actually been decertified. Most of the younger children have been taught to read and to tackle elementary problems in number, and some of the older pupils have learnt typing and hand loom weaving.

In spite of their disabilities some of the spastic children have been able to produce very creditable specimens of handwork, and these were displayed at the School Exhibition at the beginning of October. Later in the same month one of the older boys was fortunate enough to proceed to St. Loyes College, Exeter, where he is taking a secretarial training.

Specially-made equipment is of great value to this special class. A baby's wheel chair has been utilised for a younger child, with a cross-bar to prevent slipping, and with a separate table to fit. There is also a tricycle and a hand-propelled wheel chair. Pencils with broad hand grasps have proved of considerable help to some of the children. It is contemplated introducing puppetry to help with muscular control, and as a speech aid. The newly-appointed speech therapist is devoting one session each week to these children.

The services of a qualified teacher who has had experience of this type of work have now been obtained, and it is hoped to increase the size of the class and extend activities for the benefit of these handicapped children.

Diabetes.

There were five school children known to be suffering from diabetes who were under observation during 1947, three boys and two girls. The ages at which the condition was diagnosed varied from 5 years 10 months to 17 years.

All the patients are at present making satisfactory progress. The length of time they have been under observation varies from two months to three years. All are receiving insulin and four are attending school. The fifth is now at work.

Some details concerning one of the boys may be of interest.

He was given a routine medical examination on 18th November, 1946, being then 13 years 2 months old. He was in good health. His weight was 98 lbs., and urine examination was negative as regards albumin and sugar. In June, 1947, he was only 76 lbs. in weight and he was diagnosed at hospital as suffering from diabetes. He had lost 22 lbs. in seven months. He was put on treatment including 25 units of insulin daily. In October, 1947, his weight was 115 lbs., that is to say, he had gained 39 lbs. in four months. In February, 1948, his general condition was fairly satisfactory, his weight being 117 lbs., but he was having a total of 55 units of insulin daily.

Another boy whose condition was found at the age of 17 years, then weighed 129 lbs. Four months later his weight was 149 lbs.

A girl, aged 12 years, was diagnosed in December, 1947, and she has since had three months' treatment in hospital.

The diagnosis was made in one of the cases at hospital, two by their own doctors, one at a clinic and one as a result of a routine examination of urine at school.

Foot Health Clinic.

During the past year the Foot Health Clinic has dealt with a steadily increasing number of patients, and has in consequence been in a position to render a useful service in the field of child health.

Whilst the services of the clinic in the treatment of minor lesions of the feet is now well appreciated, it is not always realised that much valuable work can be carried out in the field of preventive medicine. Many deformities and chronic conditions prevalent in the adult could have been prevented had suitable treatment and advice been available in childhood.

Every endeavour is made by the chiropodists to educate the patient and the parent in the importance of general foot health. Foot hygiene is given very special consideration. Patients are advised on the importance of regular foot baths, of drying thoroughly between the toes after bathing. In the case of excessive perspiration patients are advised on the benefits of astringent lotions, antiseptic foot powder, and the frequent changing of hose and footwear. Patients suffering from hyperidrosis are also advised against ill-effects resulting from the wearing of rubber shoes and the indiscriminate use of Wellingtons. In the contrasting condition of anidrosis, the beneficial effects achieved by the application of emollients such as Lanoline Cream, etc., are brought to the notice of the patients. Useful advice is also given with regard to seasonal complaints such as chilblains. In this condition treatment is considerably assisted by the wearing of woollen hose and roomy shoes with strong soles to insulate the feet from cold and damp.

There is abundant evidence of the serious and permanent damage to children's feet resulting from the wearing of defective hose and footwear. Parents are warned about the importance of ample toe length necessary in hose. They are advised of the considerable shrinkage through repeated washing, and of the danger of holes, rough darns and coarse seams. It is appreciated that parents cannot be expected to understand the finer points of scientific shoe-fitting and, in consequence, they are advised to take certain fundamental precautions to safeguard against the child being fitted with unsuitable shoes. They are instructed to see that the child's foot is properly measured by the shoe-man, and that the child is fitted with shoes of the corresponding size. As a further precaution parents are encouraged to bring the child's shoes to the clinic before they are worn, so that the chiropodist may check them on the child's feet. In this way new shoes found to be incorrect may be returned for exchange.

Recent surveys of children's feet, carried out under supervision of the chiropodist and the direction of the School Health Officer, provided a useful opportunity of extending this particular form of preventive therapy. In studying the case records of the past it is revealed that Verrucæ Pedis still predominated among the patients treated. There has been a fall of 20 per cent. in the incidence of this lesion, statistics showing for the year 1947 that Verrucæ Pedis constituted 50 per cent. of all cases treated.

. An analysis of case records of patients seen during 1947 show the following percentages :—

Verrucæ	46%
Corns and callosities	22%
Ingrowing toe-nail	6%
Weak and flat foot	12%
Chilblains	1%
Referred to orthopædic surgeon	3·5%
Other conditions	9·5%

The work of the past year in the Foot Health Clinic has more than ever established the importance of chiropody as an integral part of the School Health Service.

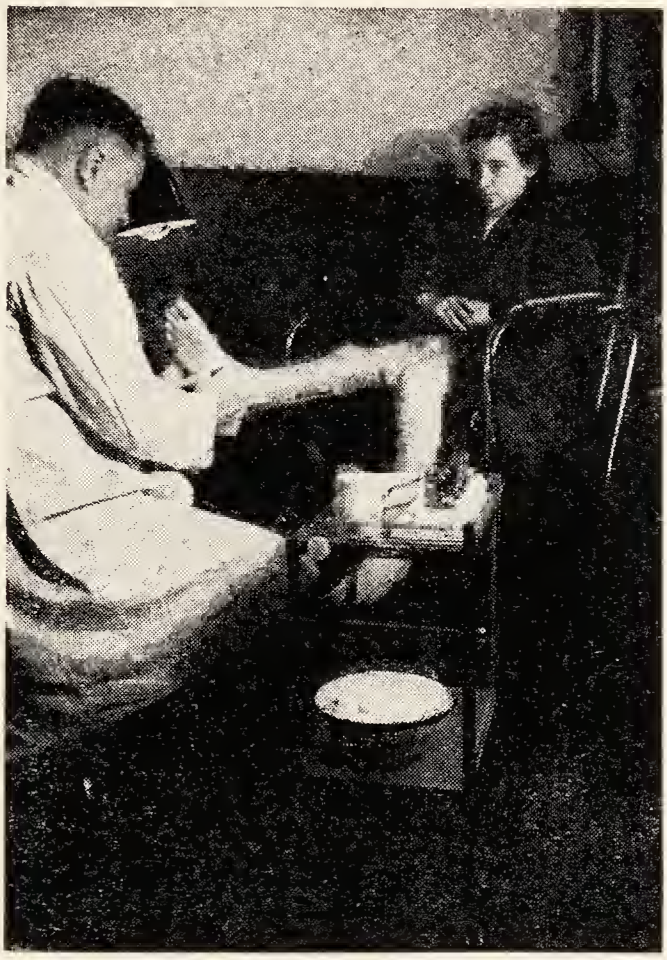


Fig. 6—A girl receiving treatment at the Foot Clinic.

Scabies.

SCABIES DIAGNOSIS CLINIC.

Suspected cases of Scabies are referred to the Regent Road Clinic by school nurses, school teachers, factory welfare nurses, assistant school medical officers and general practitioners, for examination.

Each case is examined by a worker trained in the diagnosis of Scabies and positive diagnosis is by the extraction of a live mite which is examined microscopically. All positive cases are given a treatment note to attend the treatment centre, special care being taken to impress on them the necessity of all contacts obtaining treatment on the same day. In the case of school children a home visit is made to the parents to explain and obtain their help and co-operation in the treatment of the family.

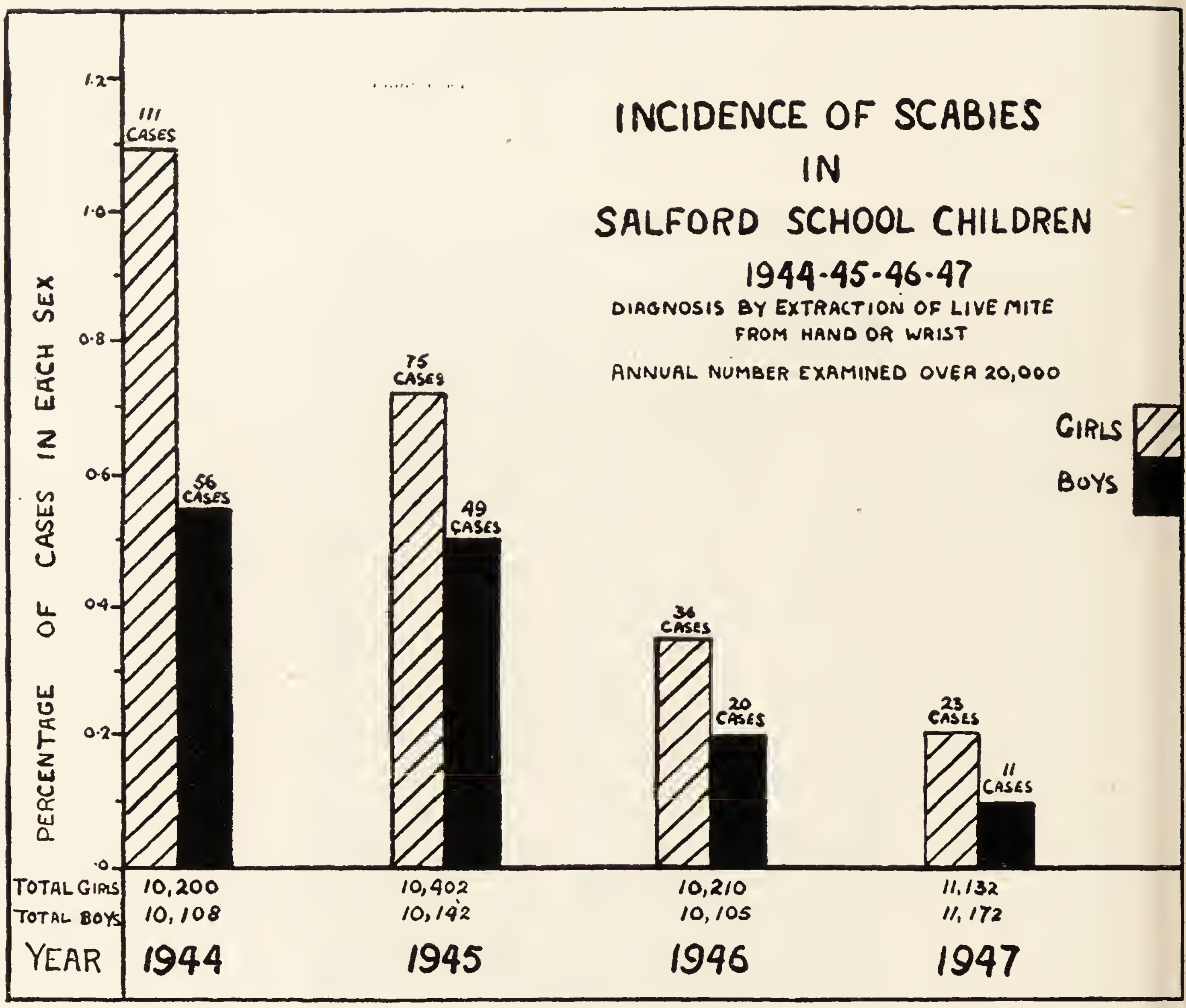


Fig. 7.

Scabies Treatment Centre.

Cases of scabies are referred to the centre for treatment which is carried out at a special centre, situated at Ladywell Hospital, by trained personnel, who are very careful to make sure that all contacts are treated on the same day. The treatment consists of a hot bath after which the attendant applies Benzyl Benzoate Emulsion, by painting the patient from the neck downwards, including the creases and folds of the skin, soles of the feet and particularly the genitals. The patient, after allowing the emulsion to dry in a little, is then asked to rub it well in, after which he is able to dress. Strict instructions are given that the patient must not wash for at least 24 hours after receiving treatment.

School Survey.

The annual examination of all Salford school children was carried out in October/November, 1947, by a trained scabies worker. The usual procedure was for the worker to sit near a window in the best possible light and for the children to file past with hands extended. The hands and wrists were examined by ordinary observation, taking about 15 seconds per child. In suspicious cases a watchmaker's lens was used to aid the inspection. A total of 22,304 children were examined in this way, only 34 positive cases of scabies were found, an incidence of 0·15 per cent. The figure for the boys was 0·10 per cent. and for the girls 0·21 per cent.

The percentage with scabies according to the traditional grouping of schools was, "Good" schools 0·17 per cent., "Average" schools 0·18 per cent., "Poor" schools 0·10 per cent.

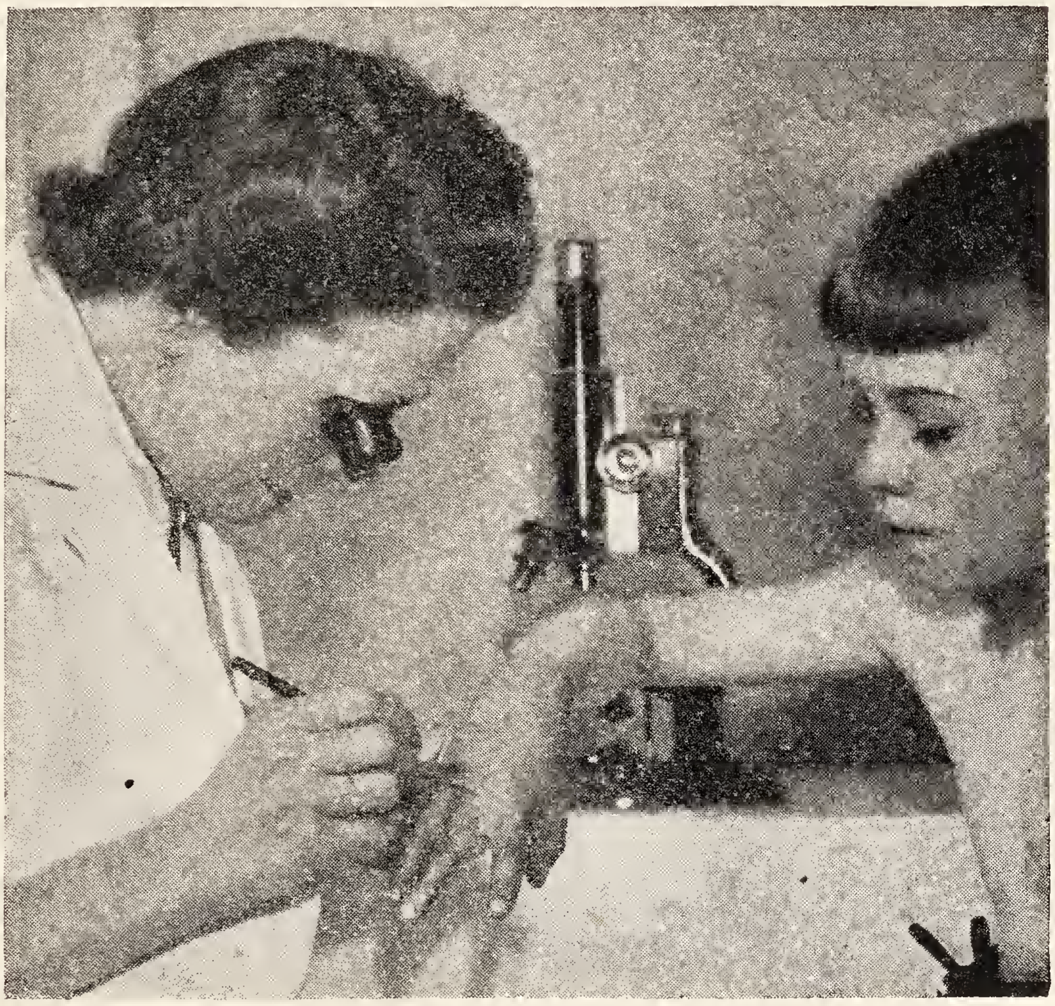


Fig. 8—The diagnosis of scabies—the extraction of a live mite.

Almoner's Report.

One hundred and four children were referred to the Almoner during 1947 for the arrangements of convalescent treatment. In every case one of the child's parents was interviewed. These discussions often revealed domestic circumstances upon which the Almoner was able to offer advice or help. Considerable effort has been made to understand each child and his/her position in the household. Thus it has been possible to select the type of convalescent home most suited to the individual child. In this connection the Almoner has received much valuable help from the Staff of the Invalid Children's Aid Association and frequent use has been made of their services.

In one or two cases of extreme poverty application was made to the Education Committee for assistance in paying railway fares for children and their escorts, and in several other cases small grants were made from the Almoner's Fund.

Many children were provided with articles of clothing, particularly nightwear, from the Almoner's dwindling store. This clothing, which was supplied by the Women's Voluntary Service from its surplus stock at the end of the war has been of inestimable value. Unfortunately, most of the articles suitable for children have now been distributed and it is feared that, in some cases, convalescent treatment in the future may be somewhat delayed for lack of suitable clothing promptly supplied.

Child Guidance Clinic.

Dr. Muriel Hughes reports :—

" The year 1947 once more shows satisfactory progress and an all round increase in the work of the clinic.

" The staffing of the clinic remains the same as in the previous year.

" The part played by the clinic in the Northern Scheme for the Training of Psychiatric Social Workers was regarded as a success. This experiment is to be repeated in 1948 but there is difficulty with regard to the time needed in allowing students to have experience in two clinics, which may interfere with this arrangement in future years.

" During the latter part of 1947 a Northern Group of Child Guidance Workers was formed with a view to the furtherance of team work in the North of England —one of the inaugural meetings was held at the Salford Clinic.

" The numbers of patients referred and seen appear to be an index of satisfactory progress, in fact, larger numbers would be impossible with the present staffing arrangements. From the point of view of securing satisfactory attendance for treatment the existence of a long waiting list for treatment is a grave disadvantage."

Two hundred and five children were referred to the clinic during the year. Of this figure, 88 were referred by the School Medical Officer, 32 by Head Teachers and 16 by the Education Department.

Forty-seven referred for enuresis, 29 for stealing, 24 for fears, 19 for aggression, 13 for backwardness, nine for truancy and eight for sex difficulties. Others were referred for tics, stammer, moods, masturbation, etc.

Seven children were found to have an I.Q. of under 70, 12 between 70 and 80, 22 between 80 and 90, 27 between 90 and 100, 26 between 100 and 110, seven between 110 and 120, ten between 120 and 130, and nine had an I.Q. of over 130.

Special Investigation Clinic.

During the year, 86 school children attended. Of this number, 80 reported for the first time, and of the remaining six, five paid a second visit and one a third visit.

The reasons for their visits were :—

> Examination of heart lesions, suspected or real, 51 ; suspected rheumatic pains, 10 ; and various other complaints such as suspected chorea, renal investigation, debility, anæmia, etc.

Of the children suffering from definite cardiac lesions, 60 per cent. were regarded as fit to take part in school life as if they were " normal " healthy children. 76 per cent. of all the children attending the clinic were thought to be fit to attend ordinary school and take part in routine drill and exercises.

PRE-SCHOOL CHILDREN.

Four pre-school children attended the clinic. Each had a congenital cardiac lesion and it was suggested that in the meantime they should be treated as " normal " children.

Parents' Club.

At the end of 1946 the first steps were taken towards the formation of a club for parents of children in whom members of the School Health Service take a special interest—children who may suffer from such handicaps as deafness, blindness, epilepsy, cerebral palsy, rheumatism, heart disease, crippling conditions, etc. For some time the need had been felt for establishing a link between these parents, and the response to invitations to come and discuss the matter was encouraging. Parents seemed glad of the opportunity of meeting others who had similar problems. They expressed appreciation of the suggestion that members of the medical and nursing staff might be invited to meet them, speak to them and answer their questions.

The first meeting, at which His Worship the Mayor of Salford presided (then Councillor T. Clarke, J.P.), was arranged in January, 1947. A well-received talk was given by Dr. Irene R. Ewing, O.B.E., of the Department of Education of the Deaf, Manchester University, and this was followed by a film show.

Dr. Mary Sheridan addressed the parents, at the next meeting, on " Some Recent Advances in the Care of Handicapped Children."

During July, the members met at Ladywell Hospital, and several films were shown to a large audience. The speaker on this occasion was Mrs. M. Eysymont, Educational Psychologist. Before the close of the meeting the parents' own committee was appointed, to meet monthly and discuss the future activities of the Club.

A social evening was held shortly after this, at which parents enjoyed several musical items and light refreshments.

Some weeks later an invitation to visit the Royal Residential Schools for the Deaf, Old Trafford, was extended by the Headmaster to members of the Parents' Club, many of whom welcomed the opportunity of seeing for themselves the excellent provision made for the education of deaf children.

The general meeting in November again took place at Ladywell Hospital through the courtesy of the Medical Superintendent and Matron, and the chair was taken by His Worship the Mayor (Alderman J. Brentnall, J.P.) who spoke of his own great interest in the care of the school child, and assured parents of his support in any project which might be of help to the handicapped child. Films were shown after a talk by Miss E. H. Schofield, Psychologist. An exhibition of remarkable examples of orthodontic treatment attracted much attention during the evening. It was clearly shown how teeth in poor positions may be corrected by regularising devices.

A Christmas dance was organised by the members, who attended in great number.

Permission was obtained for a meeting to be held in the gymnasium at Hope Hospital. Mr. George Brown, F.R.C.S., Medical Superintendent, greeted the parents and spoke on the links between the home and the hospital. A clear picture of the work of a hospital school teacher was given by Miss A. Ashworth, Headmistress of the Hope Hospital school, and Miss P. Fogg, Physiotherapist, assisted by three young patients, demonstrated the exercises for spastic children performed at the clinic, and stressed the importance of regular home exercises.

During all these meetings individual help and advice are given to parents who request it. The sense of isolation frequently experienced by parents who feel their child is " different " from others can be overcome. By " getting together " with other similarly situated parents—away from the atmosphere of hospital and clinic waiting rooms—they begin to realise their child may not be quite so " different " after all.

The Parents' Club is a growing organisation, and a valuable method of keeping in touch—parents with parents, and members of the School Health Service with the children through their parents.

Report of the Organisers of Physical Education for the Year 1st January, 1947 to 31st December, 1947.

The year under review has shown some extension and development in Physical Education and recreational activities in the various educational institutes in the City. Much still remains to be done. Some of the country's changing conditions offer greater opportunities to its people in so far as the shorter working week increases the leisure time available. Part of this should surely be spent in outdoor games and activities. These activities should be cultivated at school when liking for this type of activity can be inculcated so that desire to play games instead of watching them, remains when school years are left behind. The fact that the 15-year-old children remain at school this year gives us an opportunity in this direction. Shortage of staff still exists, generally of women teachers and teachers of infants in particular. Classes remain large, but the standard of work has not deteriorated.

Physical Training—Facilities, Equipment and Clothing.

Facilities for Physical Training have varied very little from the previous year. Some schools have provision for both indoor and outdoor work but there are many where the playground is too small or badly shaped for really adequate lessons to be taken and in some departments conditions are such that indoor lessons (even in the classroom) are an impossibility. All Head Teachers in the area are aware of the necessity for a daily period of physical activity, but it is obvious that in schools which work under such conditions this is impracticable. The raising of the school-leaving age has also tended to create greater difficulties since prefabricated classrooms often occupy playground space, or in some instances, hall space has been utilised as a classroom for this group thus cramping Physical Training lesson. Repairs to the surfaces of many playgrounds have been done and in some instances a complete resurfacing has been carried out. There are, however, several playgrounds where the surface is becoming badly worn and repair work is to be undertaken as soon as possible. The marking of schoolyards for Physical Training activities and games has continued and is welcomed by both the teaching staff and children.

Progress has been made in the provision of the larger type of equipment. Large portable apparatus consisting of benches, vaulting boxes and bucks and mats are being and have been provided in departments where it is considered that facilities are adequate and trained staff are available to ensure that it is properly and safely used. Much more of this apparatus in all-standard and senior schools could profitably be used but restrictions of supplies and trained staff limit expansion. One set of portable apparatus suitable for the use of infants and children under 11 has been installed and it is hoped that a great deal more of this also will be obtained in the coming year. The Organisers of Physical Education would like to stress that the whole trend of opinion regarding work for this age group favours the introduction of apparatus of this type. Many varieties are on the market and delivery does not usually take very long. Besides providing more vigorous activity the apparatus lends greater variety to the lesson and the enjoyment of the children must be seen to be believed. The only disadvantage, if such it can be called, is that the standard of work in the Junior Departments is raised to such a high level that large apparatus and/or fixed apparatus becomes a " must " in the Senior Departments if the work there is not to prove an anti-climax. It is emphasised also that to give the type of lesson most suitable and beneficial to the 15-year age-group, indoor accommodation with good floor space to allow the use of portable apparatus at least is a necessity.

The provision of smaller equipment has been maintained in all departments. Whilst no longer limited by the Ministry of Education in what we may order, it is still not possible to provide as much of this equipment as one would like owing (*a*) to the high cost of the articles, and (*b*) to the difficulty of obtaining the articles for Local Education Authorities. With regard to this latter point, representation has been made to both the Ministry of Education and the Ministry of Supply by the National Association of Organisers and Lecturers of Physical Education and matters had improved towards the end of the year. Further allocations of soft shoes for Physical Training have been made to most departments with the exception of infants where the sizes are difficult to obtain. There is much left to be done, however, as it is rarely possible to allow more than four dozen pairs of shoes per year to schools of 300 + children, and this scheme of supply of Physical Training clothing by the Authority is still young. In junior and infants' departments much progress has been made with regard to changing of clothing, some having almost 100 per cent. of their children stripping to knickers or shorts for indoor or outdoor lessons—certainly through the summer months. In some schools, however, there is still marked reluctance to do so.

ORGANISED GAMES.

All schools with the exception of infants earmark one of the Physical Education periods as a games lesson. This is taken either in the schoolyard, a nearby croft or, for the more fortunate schools who are sufficiently near, on either of the Committee's Playing Fields or in one of the public parks. In the case of juniors the school playground, where it is of sufficient area and good surface, can provide for the games period. Children of 11 + need a games field and many schools are badly handicapped in this respect. Good use has, however, been made of both of the Committee's grounds at Lower Broughton and Legh Road, the latter having been reconditioned after occupation by the R.A.F. In addition, various schools send children to the following parks where all available playing facilities are used—Buile Hill Park, Bolton Road Playing Field, Littleton Road Playing Field, Light Oaks Park, Oakwood Park and Ordsall Park—27 departments making use of these. The Education Committee's policy of providing transport to playing spaces has resulted in more departments being able to make use of the facilities and in many instances the schools are those most in need, who would otherwise be completely denied the opportunity of playing games on grass. The proposed extension of transport facilities, and it is hoped the completion of the pitches on the Crescent land during 1948, will make available much-needed playing space for schools in the very badly congested areas of Ordsall and Salford so that they should be able to enjoy their organised games on proper pitches and the whole standard of play should be raised in these areas. The final development of Stott Lane Playing Fields, whilst not as yet so near completion, is moving on, and 1947 has seen progress in the plans for these fields which, when finally ready, will provide excellent facilities for children and young people in the Weaste, Salford, area.

The training facilities for athletics which the Committee were able to provide during 1946 were maintained and increased in 1947, and thanks are due to the staff of the Parks Department, who were very helpful in their care of hurdles, high and long jump pits, jumping stands, etc., provided by the Committee during the summer months. Two excellent competitive athletic afternoons were held in June at the Lower Broughton Playing Field and the Mayor took the salute on the senior afternoon. More schools this year held their own sports meetings and we, as the Organisers of the area, should like to offer our appreciation of the work particularly to the teachers of schools who, having no facilities of their own, used a nearby croft with poor surface and just a few possibilities, and by their enthusiasm and drive and the fire they stir in their children, provide really enjoyable and interesting sports meetings.

SWIMMING.

It has been stated in previous reports that in order to ensure an adequate swimming programme there must be sufficient provision of baths. It is welcome, therefore, to be able to report progress in so far as the Pendleton Bath, the last of the four baths requisitioned during the war, opened for use in July, 1947, which, though really late in the season, enabled some extension of the swimming to be made. Some of the schools which, during the war period, had to use Seedley Bath were transferred back to Pendleton and much time used in travelling was saved. It has also enabled the boys from the Grammar School to attend swimming instruction after a lapse of six years. All plunges are still open for half-days only and it is hoped that further progress may be made by the baths opening for the full day. We have retained the use of the Cheetham Bath for one half-day each for boys and girls throughout the year and it has been well used by the schools in the Higher Broughton area. Swimming continued throughout the winter, one plunge being opened at Seedley Bath, two afternoons being allocated to girls and three to boys. One hundred and six classes of 30 children plus 16 classes of 20 children were arranged weekly during the summer months and 26 classes of 30 children weekly during the winter months. Unfortunately during the late summer and in the period covering the summer vacation in very favourable weather when so many Salford children practise what they have learned during the previous school term, all baths had to be closed to children owing to the high incidence of Anterior Poliomyelitis. For the same reason various swimming galas were also cancelled. This undoubtedly affected the numbers of children able to complete the tests for the Education Committee's swimming certificates.

The results of the tests for the certificates show progress on last year's figures particularly with regard to boys. The figures are as under :

	1st Class (Swim 50 yds. back, 50 yds. breast)	2nd Class (50 yds. breast)	3rd Class (25 yds. breast)
Boys	163	269	388
Girls	80	172	277

Two hundred and ten Free Season Tickets were awarded by the Baths Committee to girls and 383 to boys. Life Saving is still taught during winter months and results given below of the Royal Life Saving Society's examinations show a marked improvement on the previous year with an increase of 82 awards. This is all the more meritorious since the standard of several of the examinations has been raised, the Bronze Medallion and Bar to Bronze Medallion particularly having been made almost twice as difficult.

	Elementary Certificate.	Intermediate Certificate.	Bronze Medallion.	Bar to Bronze Medallion.
1947	80	74	39	12
1946	72	46	12	3

The Salford Hundred Examination was conducted in October and the full quota of Medals was awarded, being four to girls and eight to boys.

DANCING.

All infants' departments include at least one period of dancing and rhythmic work in their secondary physical training periods and the majority of girls' schools include one period where there is any possibility of taking the subject. In some schools more emphasis is laid on rhythmic work, in others, Scottish, English, Scandinavian, and National Dances of many lands are taught. An interesting experiment was started towards the end of the year in one of the Modern Secondary Schools in Modern Educational Dance but as yet it is too early to give any conclusions.

OUT-OF-SCHOOL ORGANISED GAMES AND ACTIVITIES.

The Salford Schools' Sports Federation promote and organise these activities. This Federation is made up of six different sections each with its own Secretary and Committee composed of teachers. It is run for the benefit of all school children in full-time attendance under the Authority. The various sections are :

1. Association Football ...	There are School League, and National and County Competitions. Eighty-four school teams take part in the various competitions. The outstanding honour gained by this Section in 1947 was the winning of the English Schools' Football Association Trophy against the Leicester Boys' team on the Manchester United Football Ground, Old Trafford, Manchester, on Saturday, 7th June, 1947. This is a most commendable success, and is due very largely to the close personal interest taken by so many teachers in the boys' welfare. Salford boys have never previously won this national trophy.

2.	Rugby Football	There are School League and County Competitions with 30 school teams taking part.
3.	Athletics	Annual school sports in which 114 school teams compete.
4.	Cricket	Forty-eight school teams take part in League activities during the summer months.
5.	Swimming	This section promotes school swimming galas and inter-school Squadron Leagues with 50 school teams competing.
6.	Netball	Forty-five teams of girls from various schools play in the League.

All these activities take place on Saturday mornings throughout the year, week-nights during the summer months and lunch-times. Playing pitches are hired from the Parks Department and paid for by the Education Committee for use of the schools in all of the activities provided by the Salford Schools' Sports Federation. The Education Committee's grounds at Lower Broughton and Legh Road are extensively used every Saturday morning throughout the whole year and almost every evening during the summer. Many of the pitches in the parks and Committee's grounds are used twice during Saturdays. The Salford Schools' Sports Federation, out of their own funds, make grants to the various schools affiliated to the different Sports Sections for the purchase of equipment, etc. Tribute should be paid to the many Salford teachers who give so much of their own private time to organise and supervise these various activities.

Throughout the year classes have been conducted for teachers in dancing, physical training and minor team games. Both the Women and Men Teachers' Physical Associations meet frequently. The men's association takes Swedish Gymnastic Tables, with opportunities to play and practise minor team games, the most popular form of activity being Agility games. The Women's Physical Training Association has organised courses in (*a*) minor games, (*b*) netball coaching, (*c*) national dancing, (*d*) Scottish dancing (two courses) and (*e*) formal apparatus work suitable for use in schools.

OUTSIDE ORGANISATIONS.

The Central Council of Physical Recreation has conducted an advanced course for women who will be taking the National Leaders' Test and the Committee were also able to help this Organisation by providing them with facilities for rehearsal at both Lower Broughton Playing Field and Broughton Modern School for the big sports review which took place in the summer at Belle Vue.

APPENDIX.

Summary of Investigations carried out.

Survey of Foot Conditions.

The survey of foot conditions of Salford school children, begun in 1946, was continued in 1947. A total of 5,101 children was examined at 20 schools, by a team of six senior students from the Northern Foot Hospital, working to standards set by Mr. Franklin Charlesworth.

The head teachers kindly co-operated by placing a spare room or hall at the disposal of the workers. Every child was examined in bare feet for the following conditions: weakness of the longitudinal arch, weakness of the metatarsal arch, defects of the lesser toes, nail defects, hallux valgus, verrucæ pedis, corns and callosities. The feet were measured and the footwear examined for correct size and the degree of serviceability. Three standards were set for each condition: "A" for satisfactory, " B " for slight defect, and " C " for marked defect. Children found in need of treatment were referred to the Chiropody Clinic of the School Health Department. A total of 64 cases of verrucæ was so referred to the clinic (1·1 per cent.).

An analysis of the figures for school entrants (4-6 years) compared with those for school leavers (13-14 years) showed that whilst the percentage of very badly fitted shoes (those at least two sizes too small) remained fairly constant (6·2 per cent. on entry and 5·6 per cent. on leaving), the incidence of defects of the feet was higher in the older children for each type of defect. On entry there were no children found with weakness of the metatarsal arch, nail defects, verrucæ, or corns and callosities of a serious nature; among the school leavers the incidence was 1·9, 0·6, 1·4 and 2·3 per cent. respectively. Hallux valgus rose from 0·4 per cent. to 4·2 per cent. and serious defects of the lesser toes from 2·9 per cent. to 4·3 per cent. Weakness of the longitudinal arch analysed to 0·4 per cent. compared with 3·8 per cent. In all these cases the figures relate only to *serious* defects.

The figures for slight defects show a similar tendency—in some cases of a much more marked character. For instance, corns and callosities rose from 2·4 per cent. to 11·9 per cent. The incidence of slight hallux valgus was 6·6 per cent. and 26·4 per cent. respectively for entrants and leavers.

The proportion of children with perfect feet at school-leaving age was about half that of those who had just started school; 62·4 per cent. were perfect on entry and only 33·4 per cent. on leaving.

A review of the condition and fitting of the shoes of all the 5,101 children (of 4 to 14 years) revealed the following defects:—

26·9 per cent. girls and 22·3 per cent. boys were wearing shoes one size too small. In addition there were 10·3 per cent. girls and 5·4 per cent. boys with footwear at least two sizes too small.

12·1 per cent. girls and 13·6 per cent. boys had shoes in a fairly poor condition, and another 4·8 per cent. girls and 8·5 per cent. boys had shoes in a very bad condition.

Expressed positively—out of 5,101 Salford school children of both sexes and all ages from 4 to 14, 65·8 per cent. had shoes accurately fitted, and 80·5 per cent. had shoes in good condition.

It is not to be assumed that the schools examined represent a cross-section of all Salford school children, and it is therefore not necessarily correct to apply the figures to the city as a whole.

Report on the Work of the Asthma Clinic (submitted by Dr. R. I. Mackay).

1. A SURVEY OF CHILDREN SUSPECTED TO BE SUFFERING FROM ASTHMA.

The purpose of the survey was primarily to make a medical assessment of the state of health of those children on the register of handicapped children because of asthma. In addition to this, the clinic was to ensure that these children received the benefits of the municipal health services as indicated in each case, and to discover any shortcomings or gaps in the service which could be remedied, and so give these children a more satisfactory health and educational record.

No medicines, other than Cod Liver Oil and Malt, were dispensed or ordered, all such treatment was left to the private doctor or to the hospital clinic treating the child. Any recommendations as to treatment and management were subject to the approval of the child's physician. In all cases the fullest co-operation with outside doctors was obtained, some cases being referred direct to the clinic by the family doctor.

No tuberculous cases were invited to, or seen at the clinic.

2. GENERAL STATISTICS OF ATTENDANCES.

The clinic has held 47 regular weekly sessions during which 315 consultations took place. A few sessions have coincided with public holidays, although the sessions have continued through the school holidays.

One hundred and forty-three children were seen at least once and 108 children were seen more than once, and of 33 children who were seen once for respiratory disorders other than asthma, six were seen more than once.

In every case the parents were gratified at the extent and nature of the examination, and co-operated well in administering the treatment advised.

3. THE NATURE OF THE EXAMINATIONS AND INVESTIGATIONS.

The first consultation took the form of a complete history and physical examination. A full medical and family history was obtained, with special reference to the relevant details, and a note was made of the social conditions and educational achievements of the child. This was followed by a careful examination of the respiratory and cardiovascular systems with measurement of chest expansion by tape measure or by the spirometer. Further physical examination was conducted as thought necessary for each case. At least 20 to 30 minutes was allowed for each child at the first visit.

In many cases full clinical and laboratory investigation had been completed by the private doctor or by hospital clinics and it was thought unnecessary to repeat this, attempts being made to ascertain the results from the parents or direct from the doctors concerned. Full investigation was reserved for those children who showed deterioration, resistance to treatment or when some symptom, e.g., rhinorrhœa indicated such a course.

Skin testing was done in the clinic, Dr. R. N. Walker supervised the radiological work and a few specimens were sent to the Public Health Laboratory.

ANALYSIS OF INVESTIGATIONS.

It was found that investigations had already been carried out in 70 instances. Twenty-six children were referred for chest radiography and 14 skin tests were carried out. In addition, sputum was investigated in two cases and one girl was referred to Hope Hospital for gastric analysis.

At the second and subsequent visits, progress was assessed and further physical examination made. Where necessary further recommendations were made and further instructions given to the parents.

4. THE SCOPE OF TREATMENT ORDERED.

As stated above, the treatment was mostly concerned with making the best use of the services available and referring suitable cases for physiotherapy, open-air school and convalescent treatment.

Nineteen children were referred to the Aural Surgeon for attention, five for Ultra-Violet Ray, eight for Convalescent Treatment, three for Specific Desensitisation and two for special consideration. Forty-seven children were already receiving adequate treatment. Of the 66 children who were advised to have breathing exercises, 58 took advantage of this recommendation.

Unfortunately it has not yet been possible to find accommodation at the Barr Hill Open-air School for the 12 children who should attend this type of school.

In several instances it was thought that better housing conditions would be of great benefit to the asthmatic child, and an endeavour was made to obtain priority housing for 19 cases where they were definitely detrimental to their health. Every effort is still being made to find suitable housing accommodation in such cases.

5. THE RESULTS.

The children were assessed into broad groups as "improving," "no change," and "worse," on the basis of the history and examination at each consultation. In evaluating treatment it must be remembered that the vast majority of children with asthma tend to recover spontaneously or with very simple measures, e.g., breathing exercises and a fresh-air life. Only where there is a severe allergic state, underlying respiratory disease or gross psychological disturbance in the family situation does the condition remain resistant. Poor social circumstances do not have the adverse effect that might be anticipated though improvement is likely to follow improved circumstances.

At the first examination, 88 children were graded as "improving," 41 were graded "no change," and 14 were graded "worse."

At the second examination there were six children showing improvement who had been graded as "worse," 18 children showing improvement who had been graded "no change," and 13 children showing no improvement from either grade.

Among the 143 children seen on account of asthma, eight children had a marked allergic rhinitis co-existing, two children had chronic bronchitis, two children required further investigation for bronchiectasis and two children had had single attacks of asthmatic bronchitis.

6. DISCUSSION OF RESULTS.

The assessments show that there is a general tendency to improvement as noted above, though the actual figures quoted for the second and third examinations are not taken from random samples. Some children were ' discharged " at the first examination (which would diminish the percentage of cases improving) and it is likely that children who were worse or frequently ill, might have been unfit when invited (so raising the percentage of cases improving), though absentees were re-invited.

In general, the physical care of these children seems to be adequate and, except in certain respects, the provisions of the School Health Service seems to be sufficient to cope with the recommendations made at the clinic.

No child recommended for admission to the Open-air School has yet been admitted. Those children who have been recommended are all urgent cases and it would seem that some extra accommodation should be utilised as soon as possible. The ideal provision would be a day school outside the city, in rural surroundings, where asthmatic children of all ages could continue their studies to the best advantage. Since asthmatic children are often found among the more intelligent groups, such a suggestion appears impracticable in view of the present shortages of buildings, teachers and transport. Only a few children would benefit from a residential school and the disruption of family life so produced is not usually justifiable.

Some children were referred for convalescent holidays. These children were usually those in poor physical condition who were unlikely to have a summer holiday with the family for economic reasons. If accommodation is available, and the parents and children agree, it would be beneficial if those asthmatic children who are unlikely to have a real summer holiday could have a regular annual holiday in the summer at public expense. At least one to two months should be allowed to give these children better resistance to respiratory infection in the winter.

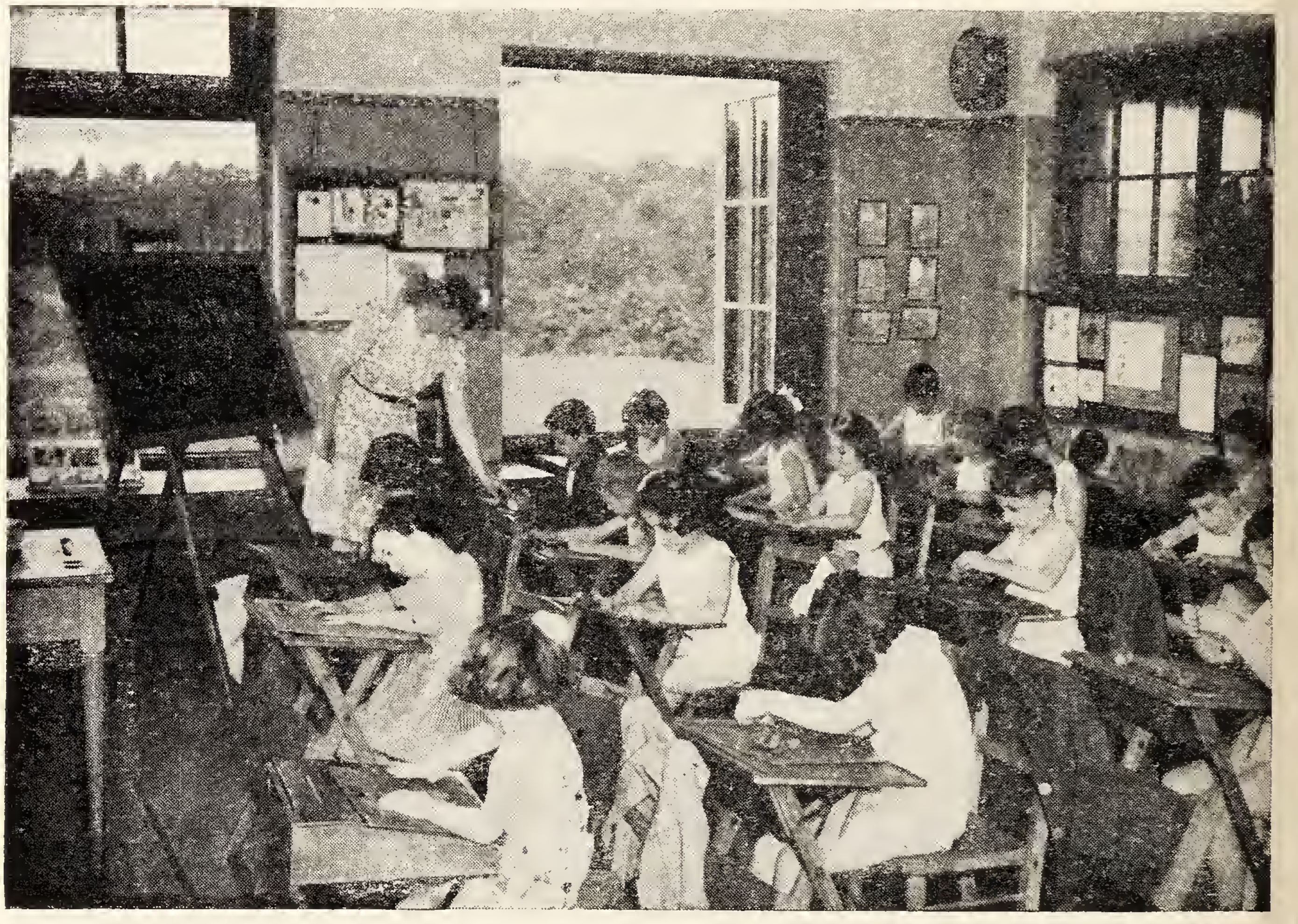


Fig. 9—Light, airy classrooms.

Asthma in children does not seem to be related directly to social circumstances or to simple poverty but there is no doubt that damp and overcrowded living conditions aggravate the disorder. Many of the more difficult cases live in damp, low-lying areas such as Lower Broughton and the Dock area. In these children there is often a history of improvement during holidays when they live in some other part of the country, and the recent flooding only added to their troubles. Nineteen cases were referred to the Housing Department for priority on medical grounds and these were the worst cases. It is clear that any survey of this kind will include a percentage of families in dreadful living conditions. It seems that some attempt to relieve the plight of these children is necessary even though the Housing Department is unable to award a high priority to asthma. Until houses are more plentiful, the problem will remain.

In eleven cases there was sufficient psychological disturbance revealed by the history as to warrant comment in the notes. Most of these were the

" nervous " type of child in a " nervous " family where the parents were unduly anxious about the child's health. No case was thought severe enough to be referred for psychological advice and treatment, but efforts were made at the interview to advise the parents accordingly.

For the purpose of " follow-up " of these children and in dealing with new cases, it would seem that a fortnightly or monthly clinic would be sufficient. Cases need not be seen more frequently than every six months except in special instances.

7. " NON-ASTHMA " CASES.

Thirty-three children were seen once and six were seen more than once. Twenty investigations were carried out including chest radiography, sputum tests and skin tests. Sixteen children were found to be having adequate treatment, but for ten, other treatment was ordered such as Ultra-Violet Ray, Cod Liver Oil and Malt, Convalescence, Open-air School and housing priority.

The problems of this group were not as serious as for the asthma group and the majority were the result of the local atmospheric conditions and chronic nasopharyngeal sepsis. Some were already on a waiting list for tonsillectomy. Many of these children have yet to be seen for a second time for diagnosis.

Head Louse Insecticide Investigations.

Several investigations were carried out during the year 1947 on new insecticides.

GAMMEXANE IN CASTOR OIL/ETHANOL INDUST. 0·2 PER CENT.

A total number of 198 children were treated with this preparation, and 119 obeyed the instructions not to wash the hair. Only one case of the 119 was discovered with live lice, and this was on the 14th day after treatment. Amongst the 79 children who had their hair washed, six cases only had live lice and/or larvæ at the completion of the 14-day experiment.

Results. With unwashed hair there was 99 per cent. success, but its effectiveness was impaired by washing the hair.

GAMMEXANE 1 PER CENT. IN SPIRIT, *diluted by four times its volume of tap water.*

The number of children treated was 15, 11 of these obeyed the instruction not to wash the hair. After seven days one child had a live louse in his hair, and at the end of the 14 days four children had live lice and/or larvæ. One washed her hair and one visited the swimming baths during the 14 days.

GAMMEXANE 1 PER CENT. IN SPIRIT, *diluted by four times its volume of distilled water.*

At the suggestion of Dr. Busvine and arising from the above experiment, distilled water was used in the place of tap water. In this investigation 13 children were treated with this preparation and 11 of these had their hair washed during the 14 days. At the end of this period there was no trace of live lice or larvæ in any of the heads of the 13 children.

D.D.T. G.N.267.

This insecticide was applied to the heads of 22 children, of whom six washed their hair once and seven twice during the fortnight. At the end of seven days, four children had live larvæ in their hair, and at the end of 14 days, two children had live lice present. Both of these children washed their hair twice in the 14 days. All the cases with live larvæ on the seventh day were quite clear on the fourteenth having no sign of lice or larvæ.

RESULTS.

All these preparations were very easy to apply and acceptable to the children treated, as they do not leave the hair unsightly as is common with lethane. The D.D.T. preparation has a slight furniture polish smell, and the castor oil preparation does impart a slightly greasy finish.

STATISTICAL TABLES.

MAINTAINED PRIMARY AND SECONDARY SCHOOLS.

TABLE I.

RETURN OF MEDICAL INSPECTIONS DURING THE YEAR ENDED 31ST DECEMBER, 1947.

A.—PERIODIC MEDICAL INSPECTIONS.

Number of Inspections in the prescribed Groups—	
Entrants	2,030
Second Age Group	1,478
Third Age Group	1,147
TOTAL	4,655
Number of other Periodic Inspections	601
GRAND TOTAL	5,256

B.—OTHER INSPECTIONS.

Number of Special Inspections	8,798
Number of Re-Inspections	7,480
TOTAL	16,278

C.—PUPILS FOUND TO REQUIRE TREATMENT.

NUMBER OF INDIVIDUAL PUPILS FOUND AT PERIODIC MEDICAL INSPECTION TO REQUIRE TREATMENT

(excluding Dental Diseases and Infestation with Vermin).

Group. (1)	For defective vision (excluding squint). (2)	For any of the other conditions recorded in Table IIA. (3)	Total individual pupils. (4)
Entrants	13	569	547
Second Age Group	150	321	439
Third Age Group	139	169	296
TOTAL (prescribed groups)	302	1,059	1,282
Other Periodic Inspections	2	132	131
GRAND TOTAL	304	1,191	1,413

TABLE II.

A.—Return of Defects Found by Medical Inspection in the Year Ended 31st December, 1947.

Defect Code No.	Defect or Disease.	Periodic Inspections.		Special Inspectio	
		No. of Defects.		No. of Defect	
	(1)	Requiring treatment. (2)	Requiring to be kept under observation but not requiring treatment. (3)	Requiring treatment. (4)	Requ to be un obser but requ treat (
4.	Skin	48	48	1,489	
5.	Eyes—				
	(*a*) Vision	189	13	74	
	(*b*) Squint	47	48	33	
	(*c*) Other	19	12	275	
6.	Ears—				
	(*a*) Hearing	24	2	139	
	(*b*) Otitis Media	59	22	499	
	(*c*) Other	28	19	291	
7.	Nose or Throat	332	503	1,241	3
8.	Speech	10	28	28	
9.	Cervical Glands	13	82	211	
10.	Heart and Circulation	34	54	148	1
11.	Lungs	87	72	191	1
12.	Developmental—				
	(*a*) Hernia	—	—	—	
	(*b*) Other	—	—	—	
13.	Orthopædic—				
	(*a*) Posture	32	17	54	
	(*b*) Flat Foot	14	14	26	
	(*c*) Other	7	11	19	
14.	Nervous System—				
	(*a*) Epilepsy	—	3	19	
	(*b*) Other	28	28	91	
15.	Psychological—				
	(*a*) Development	13	10	—	
	(*b*) Stability	—	—	—	
16.	Other	347	160	2,120	

B.—CLASSIFICATION OF THE GENERAL CONDITION OF PUPILS INSPECTED DURING THE YEAR IN THE AGE GROUPS.

Age Groups.	No. of Pupils Inspected.	A. (Good).		B. (Fair).		C. (Poor).	
		No.	% of Col. 2.	No.	% of Col. 2.	No.	% of Col. 2.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
nts	2,030	633	31%	1,207	60%	190	9%
d Age Group	1,478	516	35%	830	56%	132	9%
Age Group	1,147	369	32%	699	61%	79	7%
Periodic Inspections	601	241	40%	338	56%	22	4%
TOTAL	5,256	1,759	33%	3,074	59%	423	8%

TABLE III.

TREATMENT TABLES.

GROUP I.—MINOR AILMENTS (EXCLUDING UNCLEANLINESS).

	No. of Defects treated, or under treatment during the year.
SKIN—	
Ringworm—Scalp—	
(i) X-ray Treatment	5
(ii) Other Treatment	—
Ringworm—Body	36
Scabies	313
Impetigo	274
Other Skin Diseases	1,132
Eye Disease (External and other, but excluding errors of refraction, squint and cases admitted to hospital)	441
Ear Defects	927
Miscellaneous (e.g., minor injuries, bruises, sores, chilblains, etc.)	650
TOTAL	3,778
Total number of attendances at Authority's minor ailments clinics	59,446

GROUP II. DEFECTIVE VISION AND SQUINT

(Excluding Eye Disease treated as Minor Ailments—Group I).

	No. of Defects dealt with.
Errors of Refraction (including squint)	6,642
Other defect or disease of the eyes (excluding those recorded in Group I)	1,402
TOTAL	8,044

No. of pupils for whom spectacles were (*a*) Prescribed	1,671
(*b*) Obtained	1,659

GROUP III.—TREATMENT OF DEFECTS OF NOSE AND THROAT.

	Total number treated.
Received operative treatment—	
(*a*) for adenoids and chronic tonsillitis	380
(*b*) for other nose and throat conditions	11
Received other forms of treatment	262
TOTAL	653

GROUP IV.—ORTHOPAEDIC AND POSTURAL DEFECTS.

	Total number treated.
(*a*) Number treated as in-patients in hospitals or hospital schools	95
(*b*) Number treated otherwise, e.g., in clinics or out-patients departments	593

GROUP V.—CHILD GUIDANCE TREATMENT AND SPEECH THERAPY.

	Total number treated.
Number of pupils treated—	
(*a*) under Child Guidance arrangements	160
(*b*) under Speech Therapy arrangements	—

TABLE IV.

Dental Inspection and Treatment.

		Total number treated.
(1)	Number of pupils inspected by the Authority's Dental Officers—	
	(*a*) Periodic Age Groups	16,359
	(*b*) Specials	1,094
	(*c*) Total (Periodic and Specials)	17,453
(2)	Number found to require treatment	10,008
(3)	Number actually treated	7,308
(4)	Attendances made by pupils for treatment	10,213
(5)	Half-days devoted to—	
	(*a*) Inspection	122
	(*b*) Treatment	1,810
	Total (*a*) and (*b*)	1,932
(6)	Fillings—	
	Permanent Teeth	3,860
	Temporary Teeth	773
	Total	4,633
(7)	Extractions—	
	Permanent Teeth	1,814
	Temporary Teeth	6,733
	Total	8,547
(8)	Administrations of general anæsthetics for extraction	3,476
(9)	Other operations—	
	(*a*) Permanent Teeth	2,388
	(*b*) Temporary Teeth	844
	Total (*a*) and (*b*)	3,232

TABLE V.

Infestation With Vermin.

(i)	Total number of examinations in the schools by the school nurses or other authorised persons	56,928
(ii)	Total number of individual pupils found to be infested	5,077
(iii)	Number of individual pupils in respect of whom cleansing notices were issued (Section 54 (2), Education Act, 1944)	—
(iv)	Number of individual pupils in respect of whom cleansing orders were issued (Section 54 (3), Education Act, 1944)	—

TABLE VI.

SCHOOL MEDICAL AND DENTAL STAFF.

Names of Medical Officers.	Proportion of whole time (expressed as a percentage) devoted to	
	School Health Service.	Public Health.
S.M.O.—		
John Lancelot Burn	25·0%	75·0%
A.S.M.O.S—		
Harold Heathcote	100·0%	—
John Laurence Bradley	54·5%	45·5%
Harold Bernard Kilroe	90·9%	9·1%
Anne Rothwell Gratton (Mrs.) (part-time)	45·5%	18·2%
Ramyl Rhydwen	45·5%	54·5%
John Scully (part-time)	45·5%	—
Margaret Sproul (Miss)	18·0%	82·0%
Marian Maxwell Reekie (Miss)	18·0%	82·0%
Kathleen Mary Boyes (Miss)...	18·0%	82·0%
Eleanor P. Brown (Mrs.)	9·1%	—

Names of Dental Officers.	Proportion of whole time (expressed as a percentage) devoted to	
	School Health Service.	Public Health.
Senior Dental Officer—		
Laurence Hilton Pollitt	90·9%	9·1%
Assistant Dental Officers—		
Mary Gifford Macleod (Miss)...	100·0%	—
John Reginald Clayton	100·0%	—
Agnes Marianne Paterson (Miss)	100·0%	—
Joseph Arthur Pilling ... ... (Resigned 30th April, 1947)	100·0%	—

Nurses.	Number of Officers.	Aggregate of time given to School Health Service work in terms of whole-time Officers.
School Nurses	20	16
District Nurses ..	—	—
Nursing Assistants ...	4	4
Dental Attendants ...	5	Whole time.